

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

3443 Routier Road, Suite A, Sacramento, California 95827

PUBLIC MEETING
concerning

CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS
FOR
DISCHARGES FROM IRRIGATED LANDS
WITHIN THE CENTRAL VALLEY REGION

On 5 December 2002, the Central Valley Regional Water Quality Control Board (Regional Board) adopted a Conditional Waiver of Waste Discharge Requirements pursuant to Water Code Section 13269 for discharges to surface waters from irrigated lands. Discharges from irrigated lands include surface water discharges, operational spills, subsurface drainage and stormwater runoff. Irrigated lands include nurseries and managed wetlands as well as most land used in production agriculture.

The Regional Board will now be considering alternatives to regulation of discharges from irrigated lands, including continuing the use of, adoption of revisions to, or rescission of the Conditional Waiver, or directing staff to take related actions. The Regional Board will also consider the re-adoption of a Resolution for the Initial Study and Negative Declaration, with modifications, that was initially adopted on 5 December 2002.

A public meeting concerning this matter will be held during the Regional Board meeting, which is scheduled for:

DATE: **24/25 April 2003**
TIME: **1:00 P.M. 24 April 2003 (No sooner than this time.)**
PLACE: Central Valley Regional Water Quality Control Board
3443 Routier Road, Suite A
Sacramento, California 95827

Persons wishing to comment on this noticed meeting item must submit such comments in writing to the Regional Board no later than **21 April 2003**. Written comments submitted after **21 April 2003** will not be accepted and will not be incorporated into the administrative record unless allowed by the Regional Board.

All interested persons may speak at the Regional Board meeting, and are expected to orally summarize their written comments. Oral testimony will be limited in time by the Regional Board Chair.

Anyone having questions on this matter should contact Bill Croyle at (916) 255-3111. The documents may be inspected and copied at the Regional Board's office at 3443 Routier Road, Suite A, Sacramento, California, weekdays between 8:00 a.m. and 5:00 p.m. by appointment. These

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documents are also available on the Regional Board web site at the following URL:
<http://www.swrcb.ca.gov/rwqcb5/programs/agunit/index.html>.

The procedures governing Regional Water Board meetings may be found at Title 23, California Code of Regulations, Section 647 et seq. and is available upon request. Meetings before the Regional Water Board are not conducted pursuant to Government Code section 11500 et seq. The procedures may be obtained by accessing http://www.swrcb.ca.gov/water_laws/index.html. Information on meeting and hearing procedures are also available on the Regional Board's website at http://www.swrcb.ca.gov/rwqcb5/board_meetings/mtgprocd.html or by contacting any one of the Board's offices. Questions regarding such procedures should be directed to Ms. Janice Tanaka at (916) 255-3039.

The meeting facilities will be accessible to persons with disabilities. Individuals requiring special accommodations are requested to contact Ms. Janice Tanaka at (916) 255-3039 at least 5 working days prior to the meeting. TTY users may contact the California Relay Service at 1-800-735-2929 or voice line at 1-800-735-2922.

Please bring the above information to the attention of anyone you know who would be interested in this matter.

/S/
JACK E. DELCONTE
Acting Assistant Executive Officer

4/10/03

Central Valley Regional Water Quality Control Board

**Conditional Waiver of Waste Discharge Requirements
For
Discharges from Irrigated Lands**

April 2003

Staff Report

**Conditional Waiver of Waste Discharge Requirements
For
Discharges from Irrigated Lands**

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Staff Report
Conditional Waiver of Waste Discharge Requirements
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I. EXECUTIVE SUMMARY

At the 5 December 2002 meeting of the Central Valley Regional Water Quality Control Board (Regional Board), the Regional Board adopted a “Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands” (Conditional Waiver) pursuant to California Water Code (CWC) section 13269. At that meeting, the Regional Board also requested staff to provide at a later Regional Board meeting an analysis of comments received regarding the Conditional Waiver, including issues raised in two letters submitted by: (1) a coalition of environmental interests, and (2) a coalition of agricultural interests and water agencies. The Regional Board asked staff to present a discussion of the issues, evaluate alternatives to address issues raised, and make recommendations for revisions to the Conditional Waiver. This staff report was prepared in response to that request.

At the April meeting, the Regional Board may consider one or more of the following actions to address regulation of discharges from irrigated lands:

- a. No Action: Resolution No. R5-2002-0228 adopting the Negative Declaration and Conditional Waiver adopted on 5 December 2002 would remain in effect, or*
- b. Adopt a revised Conditional Waiver and readopt the Negative Declaration, or*
- c. Direct staff to revise Resolution No. R5-2002-0201 and the Conditional Waiver and to prepare and to circulate a new environmental document for consideration at a later Regional Board meeting, or*
- d. Rescind the Negative Declaration and Conditional Waiver that were adopted 5 December 2002.*

There are several considerations to keep in mind when reviewing the discussion of issues and weighing the various alternatives. Fully addressing water quality impacts from agricultural discharges will be a longer term effort than the existing two-year time span of the Conditional Waiver. Additionally, given the number and variety of operations in the Central Valley that fall within the definition of “irrigated lands,” regional differences in operations and conditions, and regional differences that may exist in water quality conditions, different or refined approaches may need to be incorporated in the ten year program. Much of the information required to be developed under the Conditional Waiver is foundational information that will be necessary for the watershed management approach (using Watershed Groups) to ensure compliance with water quality objectives

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and protect beneficial uses. Requirements for the Conditional Waiver need to be clarified and finalized in the near term so groups and individuals can move forward developing this information, and such information can then be used for refining approaches and decision making in the longer term program.

Both federal and state regulatory frameworks will need to be considered in the program designed to address agricultural discharges. State law in certain aspects is broader in that it applies to all waters of the state (not just navigable waters), and regulatory triggers are discharges of waste that could affect water quality (not just when impairments are documented). Additionally, waivers may not be supportable under all circumstances. The compilation and evaluation of existing data, collection of additional data, and assessment of levels of effort in the watersheds will assist in this analysis and the planning for the ten year program.

Optimally, these next few years will be about building the foundation upon which the longer term program can rest - the organization of groups, the formation or strengthening of partnerships, and the collection and analysis of information to support local program planning for resource and watershed management to ensure the beneficial uses of the waters of the state are protected.

Overview of Proposed Modifications to the Conditional Waiver

In addition to the proposed changes discussed below in association with specific issues, the following is an overview of proposed changes to the Conditional Waiver:

Staff proposes the adoption of a Conditional Waiver Order (Waiver Order) and Monitoring and Reporting Program (MRP), and readoption of the Initial Study and Negative Declaration originally adopted 5 December 2002. Additionally, staff propose to adjust the time schedule for submittal for various documents, extend the Waiver Order to three years and require filing fees.

Extending the Waiver to three years from two years. - Staff proposes extending the Conditional Waiver to 31 December 2005 given the unresolved issues and the time that has already elapsed in the term of the existing Conditional Waiver, to allow sufficient time for the preparation of reports and initiation of monitoring, and to allow sufficient time for the preparation of the ten year program and associated Environmental Impact Report (EIR).

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The following are proposed deliverables and timelines:

Watershed Groups:

Letter of intent for Conditional Waiver Coverage	30 June 2003
Notice of Intent (NOI) (includes list of owners and operators participating in Watershed Groups) and fee remittance	1 September 2003
General Report	1 September 2003
Detailed Report	1 March 2004
Monitoring and Reporting Program Plan (MRP Plan)	1 March 2004
First Monitoring and Reporting Program Report	1 March 2005

Individual Dischargers:

Letter of intent for Conditional Waiver Coverage (owners and operators)	30 June 2003
Notice of Intent (NOI) (owners and operators) and fee remittance	1 September 2003
MRP Plan	1 March 2004
First Monitoring and Reporting Program Report	1 March 2005

Proposed components may look new, but largely are not. Working from the Resolution and Conditional Waiver adopted 5 December 2002, components were developed to remove ambiguities or inconsistencies, and to provide further structure and a clear framework to assist groups and individuals in meeting the conditions of the waiver. The MRP was developed in response to the Regional Board's directive to staff to develop further detail in regards to monitoring, quality assurance and quality control, and reporting to ensure sufficient detail on monitoring requirements was provided to Dischargers, to ensure that scientifically sound data would be produced, and that data would be generated and reported in a manner that would provide for comparability.

Fees - The proposed Conditional Waiver calls for fees. The analysis and recommendation regarding fees has been prepared at the direction of the Regional Board, to address the issue of how staff efforts can be supported in managing this program.

Summary of Issues Analyzed, Responses and Proposed Changes

1) Should the goal of the Conditional Waiver be restated?

Yes. Language should be added to articulate the goal of the Conditional Waiver as being to replace the 1982 waiver and to establish an effective and efficient method of achieving protection of the waters of the state for their beneficial uses.

2) How should Dischargers be identified?

➤ **Should individual dischargers be identified?**

Yes. Watershed Groups should identify owners and operators for all parcels included within the area covered by the Watershed Group. This information is necessary for a credible program – staff must be able to identify what track dischargers have chosen (i.e., group waiver, individual waiver, or ROWDs and WDRs).

➤ **What do Watershed Groups need to look like and how will these Groups be accountable?**

Waiver conditions focus on the nature and quality of the information that must be produced, not on what the Watershed Groups need to look like or how they should operate. Dischargers should be afforded flexibility in determining the structure and operations that will work best for their respective areas. The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, CWC Division 7) focuses its enforcement on persons who discharge waste, not Watershed Groups, however, “group accountability” will be in the form of consequences should a group fail to perform. Failure to comply with the Conditional Waiver will result in termination of the waiver with respect to those dischargers included within the Watershed Group. In addition, the Porter-Cologne Act authorizes the Regional Board to enforce the conditions of a waiver.

➤ **Should Watershed Groups be responsible for compliance with the conditions of the Waiver as a Discharger?**

Watershed Groups should not be categorized as “Dischargers” as contemplated by the Porter-Cologne Act. They should not be accountable for discharges that impact water quality from the individual Dischargers they represent. Individual Dischargers are responsible for implementing management practices to protect and improve water quality.

3) Should the Dischargers pay fees?

Yes. General Fund resources may be insufficient to support the level of staff effort that will be required in administering a program regulating discharges from irrigated lands. Staff proposes that dischargers submit ROWDs and filing fees based upon threat and complexity categories I-C, II-C and III-C.

4) Should the discussion of prioritization be revised?

Yes. Language should be added in the Conditional Waiver that outline factors, which groups must consider in establishing priorities for, work in their respective watersheds.

5) Should management practice development, evaluation, tracking and enforcement of implementation of Watershed Group management practices be revised in the Conditional Waiver?

Yes. The Conditional Waiver should be revised to clarify that Watershed Groups must evaluate management practice effectiveness. No revision is necessary with respect to management practice development, as the Conditional Waiver does not require development of new practices. With regard to the position that watershed plans must describe how implementation will be monitored and enforced, Watershed Groups will need to determine the best approach for their respective areas to ensure appropriate levels of implementation will be undertaken for compliance with the Conditional Waiver, and management tracking is a required condition.

6) Should the Conditional Waiver be revised to provide additional detail on which reports will be reviewed and approved by the Regional Board?

Yes. Additional language is needed to clarify the review and approval process for the reports specified in the Conditional Waiver. Staff proposes the adoption of a Monitoring and Reporting Program to specifically identify reporting requirements, and that the Executive Officer approve reports. Additionally, staff proposes that public notice be provided of report availability and Executive Officer determinations on reports (i.e., whether they comply with waiver conditions), and annual program status information items to the Regional Board.

7) Should the Conditional Waiver for watershed programs require water quality management plans from every individual?

No. Requiring individual management plans from all dischargers as a condition of the waiver would defeat, in part, the purpose of the Watershed Group approach, and make it more akin to individual waivers or WDRs.

8) Should the Conditional Waiver specify that the watershed monitoring programs include waste constituents of concern to drinking water providers?

Yes. Staff is proposing a Monitoring and Reporting Program for Watershed Groups that requires groups to monitor for waste constituents of concern to drinking water providers, including, but not limited to, total dissolved solids, total organic carbon, pathogens and salts.

9) Should the Conditional Waiver require that the watershed plan be updated annually?

No. Annual reports are required, and annual updates to the watershed plans are not necessary given the term of the waiver.

10) Should managed wetlands be considered “irrigated lands” for purposes of regulation under this waiver?

For the present time, yes. Managed wetlands share similarities with irrigated agriculture and produce discharges warranting regulatory oversight. There are sufficient differences between managed wetlands and irrigated agriculture such that regulation under a separate program could be appropriate. However, given that the Regional Board has insufficient resources to develop a separate program in a stand-alone effort at this time, regulation under this Conditional Waiver will provide regulatory oversight for discharges from these operations. If other agencies (i.e., U.S. Fish and Wildlife Services and/or the Department of Fish and Game) are interested in developing a proposed separate program for managed wetlands, the Regional Board can direct staff to work with these agencies to develop a program.

11) Should discharges from rice acreage not specifically addressed by the Rice Pesticide Program be covered under the Conditional Waiver?

Yes. Not all pesticides used in rice production, or other constituents of concern that may be present in discharges from rice fields, are addressed by the Rice Pesticide Program.

12) Should the Conditional Waiver be revised to provide additional detail on the criteria that must be met by the monitoring program, including whether bioassessment can be included in monitoring plans and whether load reductions must be estimated and monitored?

Yes. Staff is proposing a Monitoring and Reporting Program to provide further detail on monitoring requirements. The current body of knowledge for bioassessment is such that it cannot yet be used for regulatory decision making, thus this type of monitoring is not required, but is encouraged. The Monitoring and Reporting Program also includes provisions for flow monitoring so loads can be calculated.

Current Activities

This staff report also provides status reports or information on the following topics:

- Petitions to the State Water Resources Control Board (State Board), requesting review of the Conditional Waiver Resolution
- Environmental Groups Lawsuit challenging the Regional Board’s Action and CEQA process
- Current Monitoring (University of California at Davis (UCD) Monitoring Contract)
- Future Monitoring
- Environmental Impact Report, the Ten Year Program
- Management Practices Resources for the Control of Agricultural Nonpoint Source Pollution from Discharges from Irrigated Lands

II. INTRODUCTION

At its 5 December 2002 meeting, the Regional Board adopted a “Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands” (Conditional Waiver). At that meeting, the Regional Board also requested staff to provide at a later Regional Board meeting an analysis of comments received regarding the Conditional Waiver, including issues raised in two letters submitted by: (1) a coalition of environmental interests, and (2) a coalition of agricultural interests and water agencies. The Regional Board asked staff to present a discussion of the issues, evaluate alternatives to address issues raised, and make recommendations for revisions to the Conditional Waiver for consideration by the Regional Board at the March 2003 Regional Board meeting. Based on requests by interested persons, consideration by the Regional Board was postponed until the April Regional Board meeting.

At the April meeting, the Regional Board may consider one or more of the following actions to address regulation of discharges from irrigated lands:

- a. *No Action: Resolution No. R5-2002-0228 adopting the Negative Declaration and Conditional Waiver adopted on 5 December 2002 would remain in effect, or*
- b. *Adopt a revised Conditional Waiver and readopt the Negative Declaration, or*
- c. *Direct staff to revise Resolution No. R5-2002-0201 and the Conditional Waiver and to prepare and to circulate a new environmental document for consideration at a later Regional Board meeting, or*
- d. *Rescind the Negative Declaration and Conditional Waiver that were adopted 5 December 2002.*

This Staff Report discusses the significant issues raised and proposes revisions to the Conditional Waiver. It does not evaluate in detail the options of taking no action or rescinding the Negative Declaration and the Conditional Waiver.

The waiver of waste discharge requirements adopted in 1982 (Resolution No. 82-036), which included irrigation return flows and storm water runoff from irrigated lands in its 23 categories, was a passive program. In light of the changes in Porter-Cologne Water Quality Control Act (Porter-Cologne)(i.e., the addition of sunset and renewal provisions to California Water Code (CWC) section 13269) and data documenting water quality impacts from agricultural discharges, a more active program is necessary to address these discharges. Staff developed a Conditional Waiver to commence the work in addressing discharges from irrigated lands, which the Regional Board adopted, with modifications (Conditional Waiver). Some key issues raised in relation to the Conditional Waiver include:

- Fees - how the Regional Board can assure adequate resources will be available to support staff efforts on this program.
- Identification - Whether individual dischargers need to be identified.

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- Monitoring and reporting requirements – Regional Board members wanted sufficient detail provided to groups and individuals relative to monitoring, quality assurance and quality control, and reporting requirements, to assure that scientifically sound data sets would be produced, and that the data would be developed and reported in a consistent manner to provide for comparability.

In response to Regional Board directives and comments, staff proposes the adoption of a Conditional Waiver Order (Waiver Order) and Monitoring and Reporting Program (MRP), and readoption of the Initial Study and Negative Declaration originally adopted 5 December 2002. Additionally, staff propose that the Regional Board consider adjust the time schedule for submittal for various documents, extend the Waiver Order to three years and require filing fees. The proposed MRP is discussed in Section V. and attached to the staff report. Discharger identification and fees, along with other issues, are discussed in Section VI. (Major Issues).

Fully addressing water quality impacts from discharges of waste from irrigated lands will be a longer term effort than the existing two year time span of the Conditional Waiver. To that end, the Regional Board directed staff to start planning a ten-year program. Additionally, given the number and variety of operations in the Central Valley that fall within the definition of “irrigated lands,” regional differences in operations and conditions, and regional differences that may exist in water quality conditions, different or refined approaches may need to be incorporated in the ten year program. This raises a key point – certainly, aspects of the Conditional Waiver could be modified or refined (and certain modifications are being proposed), but the work needs to start at some point. Watershed Groups and individuals may, understandably, be hesitant to start work if there is a prospect of requirements being changed. Much of the information to be developed under the Conditional Waiver is foundational information that will be necessary for the watershed management approach (using Watershed Groups) to ensure compliance with water quality objectives and protect beneficial uses. Requirements for the Conditional Waiver need to be clarified and finalized in the near term so groups and individuals can move forward developing this information, and such information can be used for refining approaches and decision making in the ten year program.

Legal and scientific defensibility should be among the cornerstones of any regulatory program. Scientific defensibility is a driver for developing the MRP. With regard to legal aspects, an important consideration is that the Regional Board must comply with federal and state water quality laws, and in some cases the standards or regulatory triggers can differ. Specifically, the federal Clean Water Act applies to navigable waters and Total Maximum Daily Load (TMDL) provisions set forth an approach for impaired water bodies. The Porter-Cologne Act applies to all waters of the state and sets forth state legal requirements for reports of waste discharge (ROWDs) and waste discharge requirements (WDRs), authorizes waivers of ROWDs and WDRs in circumstances where such waivers would not be against the public interest, and regulatory triggers for ROWDs and WDRs are discharges of “waste that **could** affect the quality of the waters of the state.” (CWC section 13260(a)(1), emphasis added.) This calls for a more active

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approach in protecting the waters of the state, not one that only triggers action once problems have developed.¹ Both federal and state regulatory frameworks will need to be considered in the program designed to address these discharges. The use of Conditional Waivers may not be appropriate under all circumstances. The compilation and evaluation of existing data, collection of additional data, and assessment of levels of effort in the watersheds will assist in this analysis and planning for the ten year program.

Foundational work is what these next few years will entail. It will involve the organization of groups, formation or strengthening of partnerships, and the collection and analysis of information and to support local program planning for watershed management that will ensure beneficial uses are protected. Dischargers are also free to choose the option of operating under the waiver for individuals (which entails preparing and submitting farm-specific information and plans), or filing ROWDs and obtaining WDRs.

Additional time is needed to extend the term of the Conditional Waiver given the following factors:

- Issues not yet resolved and the time that has already elapsed in the two year term of the Conditional Waiver;
- Effort staff has focused on addressing the identified issues which has impacted the effort in preparing an EIR and developing the ten year program;
- Amount of time that will be required for EIR preparation and program development; and
- In the interest of program continuity (conservatively, given the scope of this program, it is unlikely that an EIR and ten year program can be finalized and approved by the Regional Board by the existing expiration date – 31 December 2004).

Should the Regional Board decide to retain the existing Conditional Waiver or adopt the Waiver Order, staff proposes extending the term of the Conditional Waiver to three years from the date of adoption. This course of action will provide a framework under which foundational work can move forward, meanwhile allowing an appropriate amount of time for the preparation of an EIR and ten-year program development.

III. BACKGROUND

In 1982, consistent with California Water Code (CWC) sections 13263 and 13269, the Regional Board adopted a waiver of waste discharge requirements (WDRs) for several categories of discharges, including discharges from irrigated lands that include both agricultural return flows and stormwater (1982 Waiver). In accordance with CWC section 13269, waivers of WDRs in effect as of 1 January 2000 terminated at the end of

¹ In prioritizing work, focusing first on documented problems makes sense, but groups and individuals need to include prevention of water quality impacts in their programs and efforts.

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2002. Prior to the termination of the 1982 Waiver, the Regional Board, on 5 December 2002, in compliance with the requirements of CWC section 13263 and 13269 as amended, adopted in Resolution No. R5-2002-0201, a Conditional Waiver of WDRs for discharges from irrigated lands.

The Conditional Waiver applies to irrigation return flows (both surface and subsurface drainage), storm water runoff and operational spills. For the purposes of this Conditional Waiver, the term “irrigated lands” applies to lands where water is applied for the purpose of producing crops and includes commercial nurseries, nursery stock production and managed wetlands. The Conditional Waiver conditions encourage the development of (1) Watershed Groups that consist of both Dischargers and other parties, or (2) farm-level water quality management plans. Watershed Groups will jointly conduct work to meet waiver conditions while the owners and operators of irrigated lands would conduct the farm-level efforts. There are specific technical reports and deadlines that must be met in order to qualify for the coverage under the Conditional Waiver.

For those Dischargers who obtain coverage under the Conditional Waiver, the following conditions must be achieved:

- Development of plans to address regional or on-farm water quality issues
- Water quality monitoring to assess impacts of the discharges
- Development and implementation of management practices, as needed, to meet applicable receiving water limits

The Conditional Waiver applies throughout the Central Valley Region. Persons responsible for discharges from irrigated lands, including storm water runoff, have the option of obtaining coverage under the Conditional Waiver or submitting a ROWD for general or individual WDRs. This Conditional Waiver does not apply to persons that manage irrigated lands that do not discharge waste to surface waters.

The Regional Board limited the term of the Conditional Waiver to two years (2003 through 2004). Prior to the end of the two years, the Regional Board intended to reevaluate the Conditional Waiver. The Conditional Waiver may be terminated at any time for any individual or group of dischargers or for an entire category of discharges. The two-year term would allow the Regional Board to assess the progress of the program and make adjustments as necessary.

IV. REVIEW OF CURRENT ACTIVITIES

Petitions to the State Water Resources Control Board, requesting review of the Conditional Waiver Resolution

In early January, the State Board received two petitions requesting review of the Regional Board’s action to adopt the Conditional Waiver. One petition was filed by environmental groups (DeltaKeeper and San Francisco BayKeeper (projects of WaterKeepers Northern

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California), Natural Resources Defense Council, California Public Interest Research Group, the Ocean Conservancy, and California Sport-fishing Protection Alliance). The second petition was filed by the Agricultural Water Quality Coalition, which consists of over thirty agricultural and water organizations. To date, the State Board has not requested the administrative record or Regional Board comments regarding the petitions.

Environmental Groups File Lawsuit over Regional Board's Decision on Irrigated Lands

On 9 January 2003, WaterKeepers Northern California, California Public Interest Research Group, Inc., Natural Resources Defense Council, Inc., and California Sportfishing Protection Alliance petitioned the Superior Court of Sacramento County to issue a Writ of Mandate ordering the Regional Board to set aside its orders adopting a Negative Declaration under the California Environmental Quality Act (CEQA) and the Conditional Waiver. Petitioners allege that the discharge of pesticides and other wastes from agricultural operations impair the waters of the Central Valley Region. Petitioners also allege that the Negative Declaration and initial study prepared by the Regional Board failed to disclose significant environmental impacts and that an environmental impact report (EIR) should have been prepared.

University of California at Davis (UCD) Monitoring Contract

On 23 November 2002, the Regional Board executed an interagency agreement with the UCD to conduct an evaluation of agricultural drainage water quality throughout the Central Valley Region. The monitoring implementation plan has been developed by UCD and submitted to the Regional Board for review and approval by the contract manager. This plan contains various monitoring criteria, including, when, where, how, event monitoring, and monitoring constituents. A Technical Advisory Committee (TAC) was formed to assist in review of the implementation plan and provide technical assistance to the contract manager. On 21 February 2003, the first Technical Advisory Committee meeting was held to receive comments and input on the proposed implementation plan's project. The monitoring plan was approved by the contract manager and UCD began monitoring during the week of 24 March 2003. This is phase one of a two-phase monitoring effort the Regional Board is undertaking to characterize agricultural drainage and stormwater drainage from irrigated lands.

Future Monitoring (Phase Two)

The State Board provided Cleanup and Abatement funds to the Regional Board to follow-up the UCD monitoring contract to expand the monitoring of these discharges and further assess the impact of these discharges on water quality throughout the Central Valley region. As discussed during the December 2002 Regional Board meeting, phase two monitoring efforts must be ready prior to the completion of the UCD contract to ensure that monitoring contract resources are available to the Regional Board without the loss of monitoring during the 2003/2004 wet season and 2004 irrigation season. To execute a contract for phase two monitoring, staff is preparing a *Request for Technical Proposals for Water Quality Investigation* (RTP). The RTP will include sample collection, laboratory analyses and reporting field and laboratory data. The RTP will identify the

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technical requirements for the field and laboratory activities and the minimum qualifications of interested persons. Based on State administrative contracting requirements, the RTP will be submitted to the State agencies and University laboratories that may be interested and can conduct this type of field and laboratory work. Regional Board staff anticipate that the RTP will be mailed by the mid April 2003. Interested agencies will receive 30 days to submit their technical proposals. Staff will take approximately two weeks to evaluate the proposals and award the contract. Staff will be submitting a request for contract with the potential contractor to the State Board Contract Office by 1 June 2003. A contract is anticipated to be in place prior to September 2003. Staff will coordinate with the contractor to schedule and perform the dormant spray season (2003/ 2004) irrigation season monitoring.

Status of Environmental Impact Report, the 10 Year Program

In adopting Resolution No. R5-2002-0201, the Regional Board committed to preparing a 10-year implementation Program for the regulation of waste discharge from irrigated lands to assure water quality standards are met, and to undertake an EIR process during the next two years to analyze the potential significant adverse environmental impacts of that project. To initiate the EIR process, Regional Board staff have prepared a Notice of Preparation (NOP), in accordance with the California Environmental Quality Act. The NOP is included in the Staff Report as **Attachment A**. The NOP specifies that the project will be an analysis of the potential significant adverse environmental impacts of the Regional Board's regulation of discharges of waste from irrigated lands to waters of the state in accordance with the Regional Board's regulatory authority under Porter-Cologne. Specifically, the environmental review will analyze the potential significant adverse environmental impacts of the regulation of discharges of waste using one or more of the regulatory approaches available to the Regional Board, pursuant to Porter-Cologne. Regional Board staff held two EIR scoping meetings with stakeholders in Fresno and Sacramento, on 5 and 6 March 2003, respectively. Written comments were submitted by 31 March 2003. Review of these comments is ongoing. Additional planning and scoping sessions may be proposed based on the comments received by the Regional Board on or before 31 March 2003. Since the Regional Board intends to fund and direct the preparation of a draft and final EIR by an independent contractor, a draft Request for Proposals (RFP) is being developed. An updated schedule of tasks to complete the EIR is included in this staff Report as **Attachment B**.

Status on Available Management Practices Resources for the Control of Agricultural Nonpoint Source Pollution from Discharges from Irrigated Lands

A key component of the Conditional Waiver is for Watershed Groups or individual Dischargers to identify and promote management practices that reduce discharges of waste from irrigated lands to acceptable levels. At the December meeting, questions were asked regarding which existing management practices are available to Dischargers to control discharges of waste. The Regional Board directed staff to investigate categories of management practices and provide the information for discussion.

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In response to the Regional Board's request, management practice information has been collected and archived in a matrix of reference resources. This matrix has been attached (**Attachment C**) to the Staff Report for the Regional Board's review. The matrix is divided into three key areas for nonpoint source runoff control; pest management strategies, onsite practices, and crop production material application methods. There is a brief description of the management practice, the reference, and where the resource can be accessed. Through the process, the selection of which measures to incorporate in the matrix was based on those strategies developed in conjunction with acceptable scientific methods, including peer review, and germane to the crop production systems of California. This included information from research conducted by the Natural Resources Conservation Service, University of California, the State Board, the Regional Board, California Department of Pesticide Regulation, and other leading research institutions. The matrix was specifically designed to dovetail with other efforts in progress within the Regional Board and is not a complete compilation of management practice resources. Presently, the matrix can be accessed through the Regional Board shared drive for internal use. If the Regional Board would like this information to be available to the public, the Regional Board could direct staff to post the matrix on its website.

There is a diversity of comprehensive management measure information available to Dischargers and sustainable practice research is ongoing in many commodity areas. In addition, through the partnerships formed between commodity groups, University of California, and regulatory agencies such as the Department of Pesticide Regulation, growers can connect with professional support when implementing production approaches to include a menu of management practices. For example, the California Almond Board has a website devoted to grower education and outreach on the progress of the almond industry Pest Management Alliance. Interested persons can access current and past reports on strategies for reducing the offsite movement of organophosphate pesticides from orchards; information on alternative pest control tactics, including a calculator to compare and contrast production costs prior to choosing a specific pest control method; and a calendar of dates for attending field demonstration seminars where growers can discuss and observe first hand the implementation of management practices.

Also provided in **Attachment D** of the Staff Report is a "Commodity Outreach Contact List." This list will assist Regional Board staff, the individual Dischargers, Watershed Groups and the public in working to address commodity specific issues. Note that the Regional Board is not directing that Dischargers use any specific practice, but is simply providing available information for use as appropriate.

V. MONITORING AND REPORTING ISSUES

Monitoring Requirements

The Conditional Waiver includes conditions that require Watershed Groups or individual farmers (Dischargers) to develop monitoring programs to assess the sources and impacts of waste in discharges from irrigated lands, and where necessary, to track progress to reduce the amount of waste discharged. Regional Board staff have proposed a

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Monitoring and Reporting Program (MRP), which outlines the general monitoring, and reporting requirements for Watershed Groups and individual Dischargers. The proposed MRPs identify minimum requirements and must be expanded by the Discharger or the Watershed Groups to address watershed or facility specific issues. The Watershed Group could also receive a watershed specific MRP executed by the Executive Officer based on the proposed MRP and the monitoring plans presented to the Regional Board as required by the Conditional Waiver. Watershed Groups and Dischargers will be required to meet this MRP. They will not be able to implement any changes to this MRP that would reduce the quantity or quality of the monitoring and reporting until the Regional Board or the Executive Officer issues a revised MRP. The purpose of this monitoring program is to describe the minimum requirements for a Watershed Group and a Discharger Monitoring Program. The Watershed Group shall add specifics to this program, including sites to be monitored, frequencies of monitoring, parameters to be monitored, documentation of monitoring protocols to complete a MRP Plan that will be submitted to the Regional Board for review and approval by the Executive Officer. Staff will assess the need to propose watershed or Discharger specific MRPs based on all of the information available to the Regional Board. The proposed MRPs are attached to this Staff Report. The MRPs can be considered by the Regional Board as part of the proposed revised conditional Waiver or separately as a stand-alone document. Staff recommend that the Regional Board approve the MRPs for both Watershed Groups and individual Dischargers

Monitoring Quality Assurance Project Plan

As required by the Conditional Waiver, Watershed Groups and individual Dischargers are required to develop and submit to the Regional Board a monitoring program as stated above. Collecting, analyzing and presenting water quality data to determine compliance with the conditions of the Conditional Waiver must be done to a high standard. The agricultural and environmental interests have both stated repeatedly, that water quality data must be of high quality when conducting special studies, water body assessments, and ambient monitoring programs. For this past work, various Quality Assurance Project Plans (QAPPs) have been developed and implemented to insure that limited monitoring resources are used efficiently, effectively and result in high quality data. Regional Board staff propose that QAPPs must be developed by the Watershed Groups and Dischargers and shall include site-specific information and field and laboratory quality assurance requirements. The QAPPs are required to be submitted to the Regional Board for review and approval by the Executive Officer. Regional Board staff developed QAPP requirements to identify the major elements of a quality assurance and a quality control program that need to be described in the monitoring QAPP. The objective of the QAPP requirements is to explain the quality assurance components that should be included in the QAPP for the watershed monitoring. The elements described in the QAPP requirements document will provide a framework for developing watershed specific monitoring QAPP. The proposed QAPP Requirements are attached to and part of the proposed MRPs (MRP, Attachment A).

Pesticide Use Reports

A question has been raised regarding the use of Pesticide Use Reports (PUR) instead of submitting pesticide data to the Regional Board as part of the monitoring requirements. Monitoring data reports and implementation (management practices and effectiveness monitoring) plans cannot be adequately reviewed without information on the types and amount of pesticides being used in the watershed. To be effective in providing this information to the Watershed Groups and the Regional Board, the PUR must timely report the type, volume and use. Timely reporting is critical in order to adequately evaluate current discharges and the effectiveness of the implementation plans. Unfortunately, the PUR is not released during the same year the information is collected and is difficult or impossible for the Regional Board staff to extract data and relate that data to specific implementation plans or watershed efforts. In addition, given the extremely limited resources available to the Regional Board to implement this program, the use of the PUR instead of the direct submittal of pesticide data cannot be considered feasible. Currently, growers are required to report the pesticides used, amount of pesticides, the size of the field treated, the location of the field, the land use and crops, and the time of application to the County Agricultural Commissioners. Dischargers operating under the Conditional Waiver for individuals must submit this information as part of the Conditional Waiver reporting requirements. Dischargers participating in a Watershed Groups must submit this information to the group for compilation and analysis. Watershed Groups must summarize this information as part of the Conditional Waiver reporting requirements.

VI. MAJOR ISSUES REGARDING THE CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS

Environmental, agricultural and municipal water provider groups have raised issues on specific provisions of the Conditional Waiver, and the U.S Fish and Wildlife Service and California Department of Fish and Game have commented on the applicability of the Conditional Waiver for managed wetlands.

Regional Board staff has evaluated these issues and identified the major concerns that can be addressed at this time. The following information discusses each of the major issues. The format for each issue includes a statement of the issue, the relevant excerpt from the Conditional Waiver, the Agriculture and Environmental Group positions, a list of considerations relevant to the issue, an analysis of alternatives that may be considered by the Regional Board, and staff recommendations. In some cases, staff has proposed revisions to the Conditional Waiver.

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Issues discussed in this report are as follows:

1. Should the goal of the Conditional Waiver be restated?
- 2.A Should Individual dischargers be identified?
- 2.B What do Watershed Groups need to look like and how will these groups
- 2.C Should Watershed Groups be responsible for compliance with the conditions of the Waiver as a Discharger?
3. Should the Dischargers pay fees?
4. Should the discussion of prioritization be revised?
5. Should management practice development, evaluation, tracking and enforcement of implementation of Watershed Group management practices be revised in the Conditional Waiver?
6. Should the Conditional Waiver be revised to provide additional detail on which reports will be reviewed and approved by the Regional Board?
7. Should the Conditional Waiver for Watershed Groups require water quality management plans from every individual?
8. Should the Conditional Waiver specify that the watershed monitoring programs include waste constituents of concern to drinking water providers?
9. Should the Conditional Waiver require that the watershed plan be updated annually?
10. Should managed wetlands be considered irrigated agriculture?
11. Should discharges from rice acreage not specifically addressed by the Rice Pesticide Program cover by the Conditional Waiver?
12. Should the Conditional Waiver be revised to provide additional detail on the criteria that must be met by the monitoring program, including whether bioassessment can be included in monitoring plans and whether load reductions must be estimated and monitored?

ISSUES

1. **Should the goal of the Conditional Waiver be restated?**

Existing Resolution:

“BE IT FURTHER RESOLVED, that the goal of these waiver conditions is to assist in achieving water quality objectives in the Water Quality Control Plans (Basin Plans) by providing a program to manage discharges from irrigated lands that cause or contribute to conditions of pollution or nuisance as defined in Section 13050 of the California Water Code or that cause or contribute to exceedances of any Regional, State, or Federal numeric or narrative water quality standard.”

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Agricultural Position:

The stated goal is too broad. While progress will be made, it is unreasonable to think that all problem discharges will be brought completely under control within the limited timeframe of the term of the waiver. The goal should be assessment of water quality and the impacts of constituents that can adversely affect beneficial uses and promote the adoption of appropriate management practices.

Environmental Position:

Merely assisting in achieving objectives will not assure compliance with objectives.

Considerations:

- The Conditional Waiver replaces the waiver adopted for irrigated lands in 1982 so that these discharges are regulated and comply with Basin Plan and the Water Code.
- The Conditional Waiver provides a program to improve the management of discharges from irrigated lands by the dischargers and by the Regional Board.
- The Conditional Waiver requires the development of information to document that discharges from irrigated lands are in compliance with Regional, State, or Federal numeric or narrative water quality standards and/or identifies discharges that require additional management practices be implemented to bring those discharges in to compliance.
- It is in the public interest for dischargers to comply with water quality objectives and protect beneficial uses.
- The goal of the waiver conditions was discussed during the 5 December 2002 Board meeting and by the end of the public hearing, all parties appeared to understand the intent. The Regional Board directed staff to begin developing an EIR for a ten year plan to bring discharges into compliance with Regional, State, or Federal numeric or narrative water quality standards, so when this environmental assessment is complete there will likely be additional actions the Regional Board can consider and adopt to ensure compliance with the Regional Board's plans and policies and the Water Code.

Discussion

The goal of the Conditional Waiver is to ensure that discharges from irrigated lands to surface waters are in compliance with the Water Code and the Regional Board's plans and policies. The Conditional Waiver can and does contain a time schedule to document existing water quality conditions, management practices, implementation plans, and water quality improvements which will lead to compliance with these plans and policies.

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The Regional Board should consider more specific findings to clarify the intent of the Conditional Waiver and why the conditions are needed. The first question may be “Is a Conditional Waiver needed for discharges from irrigated lands?” Staff agree that a Conditional Waiver is needed and should be adopted by the Regional Board. A Conditional Waiver can effectively and efficiently regulate some types, if not many types, of irrigated land discharges. The Water Code requires persons who discharge waste to waters of the state to obtain WDRs or a conditional waiver of WDRs. Discharges from irrigated lands typically contain wastes, including pesticides and sediment. Therefore, either WDRs or a waiver is required for such discharges. The 1982 Waiver did not provide adequate conditions and would not comply with recent revisions to CWC section 13269. The new Conditional Waiver can provide improved and effective management of some discharges from irrigated lands, but not all discharges. Staff considered a Conditional Waiver (existing or revised) as one of the many alternatives available to the Regional Board to effectively regulate irrigated lands Dischargers.

The Conditional Waiver can begin to better document existing water quality conditions; identify major discharges; identify problematic activities, crops, regions, and constituents; and identify effective management actions or practices. This information and documentation is critical to the mission of the Regional Board and will assist the Regional Board in the development and completion of the EIR for the ten-year implementation program to bring these types of discharges into compliance with the State and Regional Boards plans and policies.

The Conditional Waiver must include conditions to ensure compliance with water quality control plans and with the Water Code. At a minimum, the conditions must require the identification of discharges and/or Dischargers, improve and document communication between the Dischargers and the Regional Board (as there was limited or no communication under the 1982 Waiver), help to identify the specific actions and standards necessary to manage the conditional waiver program, and to ensure that water quality is protected. The conditions must be sufficient to ensure that authorized discharges are not against the public interest and to ensure that the quality of the waters of the State are protected. Waiver conditions cannot allow for discharges that exceed water quality objectives or do not comply with the Basin Plan requirements.

Alternatives

- Option No. 1 Do not revise the goal statement in the Resolution.
- Option No. 2 Include language indicating beneficial uses must be protected. This option would address concerns expressed by both the agricultural community and municipal water providers.
- Option No. 3 Replace the phrase “assist in achieving” with “achieve”. This would more accurately reflect the law and the Regional Board’s intent of the conditions in the Conditional Waiver.

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- Option No. 4 Add a target date for achieving water quality objectives. The proposed Conditional Waiver states that the Regional Board has directed staff to develop an EIR for the development of a ten-year implementation plan. Referring to the plan in the goal statement can highlight this target.
- Option No. 5 Add a finding to the Conditional Waiver that states the Regional Board's intent that the goal of the conditions in the Conditional Waiver.

Staff Recommendation

Staff recommends Option No. 5 to revise the findings to better state the intent of the Regional Board with regard to the Conditional Waiver. Additional findings are also proposed in the Conditional Waiver to address option No. 2. Option No. 4 is addressed by revision of the existing Resolution and proposed Conditional Waiver, which added the development of an EIR for a ten year implementation program.

2.A. Should Individual dischargers be identified?

Existing Conditional Waiver:

“Organization

General

The initial submittal from the Watershed Group must identify the lead agencies and/or organizations that will develop a watershed or subwatershed program, the key contact(s), a description of the watershed, a map of the watershed and a commitment to work with the Regional Board to satisfy the conditions of this waiver.

Map

The Watershed Group will provide a map of the area covered by the watershed program. Additional participants who are not identified as a lead agency/organization should also be provided at this time.”

Agricultural Position:

Individual Dischargers should not be identified. It is unnecessary, unreasonable and infeasible to identify all participants. Confidentiality must be maintained to avoid the risk of third party lawsuits.

Environmental Position:

Identification of every field, drain, farmer & chemical used in the watershed is essential to ensure that water quality is protected. An adequate regulatory mechanism must include specific identification of growers that participate in watershed programs so the Regional Board is able to audit program implementation. Participants must be identified so the Regional Board can audit the program and identify egregious

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polluters. Information is needed to fill information gaps in Regional Board knowledge regarding how many agricultural discharges are occurring and chemical use.

Considerations:

- If the Watershed Group is the only entity that knows which Dischargers are active participants, there is no way for the Regional Board to determine which Dischargers are not operating under the Conditional Waiver. The Regional Board must be able to identify which regulatory track a Discharger chooses (i.e., Watershed Group waiver, individual waiver, or waste discharge requirements).
- Porter-Cologne (CWC Division 7) does not provide for Discharger confidentiality, and has no citizen suit provisions.

Discussion:

Porter-Cologne applies broadly to “persons” who discharge waste that could affect the quality of the waters of the State. The Regional Board typically refers to such persons as “Dischargers.” In addition to individuals, CWC section 13050(c) provides that the term “person” includes any city, county, district, the state and the United States, to the extent authorized by law. “Persons” that are considered “Dischargers” include business owners or landowners that conduct the activities that result in the discharges of waste, operators who lease land from landowners and conduct the activities that result in the discharges of waste, and, in most cases, the landowners that lease the land to others who conduct the activities that result in the discharges of waste.

Although the landowner's responsibility for the discharge may be indirect, several orders of the State Board have upheld the principle that landowners can and should be named as dischargers in waste discharge requirements and enforcement orders. (State Water Resources Control Board, Office of Chief Counsel, Memorandum to Division of Water Quality, 24 September 1987.) CWC sections 13260, 13263, and 13269 require persons who discharge waste (dischargers) to obtain WDRs or a conditional waiver of WDRs. The responsibility for the discharges rests with the “persons” as defined in Porter-Cologne. Porter-Cologne does not provide for Discharger confidentiality.

Dischargers are ultimately responsible for the discharges of waste they cause. A credible program must be developed and implemented consistent with the requirements of Porter-Cologne to support adoption of a Conditional Waiver instead of WDRs or prohibitions of discharge. A credible program should include a way for the Regional Board to identify which regulatory track a Discharger chooses (i.e., Watershed Group waiver, individual waiver, or waste discharge requirements). A certain base level of Discharger information will need to be submitted to the Regional Board for this to be a credible program.

However, for dischargers operating under a Watershed Group, specific information on operational practices and implementation of management practices can be collected,

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analyzed and summarized on a watershed scale by these groups for submission to the Regional Board.

Staff recommends that the Conditional Waiver be revised to clarify that Watershed Groups must include owner and operator information for the parcels included within the Watershed Group.

Alternatives:

Option No. 1 – Do not change the Conditional Waiver (i.e., continue to require identification of dischargers included within the Watershed Group).

Option No. 2 – Continue to require identification of dischargers included within the Watershed Group and revise the Conditional Waiver to clarify that Watershed Groups must identify owners and operators for all parcels included within the Watershed Group.

Option No. 3 – Revise the Conditional Waiver to eliminate the requirement that Watershed Groups identify the dischargers included within the Watershed Group.

Staff Recommendation:

Option No. 2. This information is necessary for a credible and viable regulatory program. The proposed Conditional Waiver has been revised to clearly require the Watershed Groups to submit a list of Dischargers (owners and operators) that will participate in the Watershed Groups under the terms and conditions of the Conditional Waiver.

2.B. What do Watershed Groups need to look like and how will these groups be accountable?

Existing Conditional Waiver:

Conditions focus on deliverables that must be submitted to the Regional Board.
There are no conditions relative to group structure and/or operations.

Agricultural Position:

- Water agencies have no enforcement powers so must not be held accountable for individual dischargers' non-compliance that may be reflected in the district's discharges from the drainage system.
- Sanctions for non-compliance or non-participation are vague. More detail is needed. Will the entire group be held accountable for failure to meet standards imposed at the watershed level? If so, will all growers in the group be subject to loss of the waiver. What steps, if any, short of waiver revocation does the Regional Board expect to take?
- If a group fails or does not form at all, the financial burden is placed on individual farms – may put some farms out of business.

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- The role of the Watershed Group is to encourage their membership to implement appropriate practices but the group will have no ability or authority to enforce this.

Environmental Position:

None stated specifically related to group structure and/or operations, or group-level accountability.

Considerations:

- It is recognized that water agencies, other than the State and Regional Boards, do not have enforcement power under Porter-Cologne. It is also recognized that some water districts have the express authority and have undertaken responsibilities for managing water quality.
- Porter-Cologne does not clearly provide for enforcement actions against Watershed Groups. The Regional Board's enforcement authority under Porter-Cologne is focused on Dischargers.

Discussion:

Waiver conditions focus on the nature and quality of the information the Watershed Groups must generate and the activities they undertake to ensure water quality objectives are met and beneficial uses are protected. It is not as important what the Watershed Groups look like or how they choose to operate. What is important is the information they develop, and the monitoring and implementation activities they conduct. Thus, group "form" conditions were not incorporated into the waiver. Further, what these groups look like will most likely vary greatly depending upon the individuals in the given localities and organizational structures/efforts that already exist. Communities should be afforded flexibility to determine what structure and operations will work best for their respective areas. Thus, waiver conditions are centered on information and activities.

Porter-Cologne does not clearly provide a method by which a Watershed Group could be held accountable through enforcement actions. Enforcement authority in the Porter-Cologne Act is focused on discharges and dischargers. Group-level accountability does exist, however, in the form of the consequence should the Watershed Group fail to comply with the conditions of the Waiver. CWC section 13050 authorizes the Regional Board to enforce the conditions of a waiver. In addition, failure to comply with the Conditional Waiver will result in termination of the waiver with respect to those Dischargers included within a Watershed Group.

It is recognized that Watershed Groups in general would not have formal enforcement authority over members. However, groups could condition membership on reasonable participation, and not include recalcitrant dischargers within their respective watershed program. The Watershed Group should seek to implement group activities in a manner that will prevent water quality impairments, address known water quality impairments, and demonstrate sufficient improvements over a reasonable amount of time to support

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continued regulation under a conditional waiver. Watershed Groups should determine the best approach for their respective areas.

The following is additional information relative to particular entities, with selected excerpts from the *Draft Program of Implementation Report for the Control of Diazinon in the Sacramento and Feather Rivers*, May 2002, Regional Water Quality Control Board, Central Valley Region, (CVRWQCB, 2002):

Water Districts

California law defines a water district as any district or other political subdivision, other than a city or county, a primary function of which is the irrigation, reclamation, or drainage of land or the diversion, storage, management, or distribution of water primarily for domestic, municipal, agricultural, industrial, recreation, fish and wildlife enhancement, flood control, or power production purposes. (Wat. Code, § 20200.) Such districts include, but are not limited to, irrigation districts, county water districts, California water districts, water storage districts, reclamation districts, county waterworks districts, drainage districts, water replenishment districts, levee districts, municipal water districts, water conservation districts, community services districts, water management districts, flood control districts, flood control and floodwater conservation districts, flood control and water conservation districts, water management agencies, and water agencies. (Ibid.)

Generally, in California there are two methods for forming districts: (1) by enactment of a general act under which the districts may be formed in accordance with procedures set forth in the act; and (2) by a special act creating the district and prescribing the powers it will have, its territory and procedural provisions. The California Department of Water Resources (DWR) updated a general comparison of water district acts in 1994 (DWR, 1994), wherein it summarized the 39 general acts and 116 special acts in existence at the time.

The Water Code provides general authority for the following types of districts:

- *County Flood Control Districts (division 5, part 1, chapter 2)*
- *Irrigation Districts (division 11)*
- *County Water Districts (division 12)*
- *California Water Districts (division 13)*
- *California Water Storage Districts (division 14)*
- *Reclamation Districts (division 15)*
- *County Waterworks (division 16)*
- *County Drainage Districts (division 17)*
- *Water Replenishment Districts (division 18)*

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- *Municipal Water Districts (division 20)*
- *Water Conservation Districts (division 21)*

The purposes of districts vary and in general can include developing water rights; producing, acquiring, transporting, storing, supplying and distributing water for irrigation, domestic, industrial and municipal purposes; water storage; collecting, treating and disposing of sewage, waste and storm water; water conservation; managing groundwater; hydroelectric power generation; and draining and reclaiming lands.

Some districts have the express authority and have undertaken responsibilities for managing water quality. Water Replenishment Districts have broad authority (even extending beyond district boundaries) to protect groundwater from contamination (Wat. Code, §§ 60224-60226). Some districts formed under special act also, among their other roles, undertake water quality management functions for ground water. The Colusa County Flood Control and Water Conservation District has the authority to carry out programs to solve groundwater problems (DWR, 1994, p. 149). The Orange County Water District, in addition to storing, acquiring and distributing water, has authority to improve and protect quality of groundwater supplies (DWR, 1994, p. 250). The San Gabriel Basin Water Quality Authority has authority to undertake projects to correct water quality problems and to adopt a basin-wide groundwater quality management and remediation plan consistent with federal, state and local plans (DWR, 1994, p. 306).

Additionally, surface water quality management has been included in the roles undertaken by some districts formed by special acts. The El Dorado County Water Agency has authority to control and conserve storm and flood waters; and to store, conserve, reclaim, appropriate, acquire, import and protect water (DWR, 1994, p. 169). The Mariposa County Water Agency, in addition to controlling and conserving flood and storm waters; and storing, conserving, reclaiming and importing water; has the authority to prevent contamination (DWR, 1994, p. 213). The Mojave Water Agency includes water protection in its authorities (DWR, 1994, p. 220), as does the Placer County Water Agency (DWR, 1994, p. 259). The Monterey County Water Resources Agency includes protection of water quality in the functions it carries out (DWR, 1994, p. 228). The South Delta Water Agency has the authority to enter into contracts with the United States and California to assure the lands within the agency's jurisdiction have a dependable supply of water of suitable quality sufficient to meet present and future needs (DWR, 1994, p. 349). The Sutter County Water Agency has authority to prevent pollution and contamination of water (DWR, 1994, p. 353), as does the Tuolumne County Water Agency (DWR, 1994, p. 363), and the Yuba-Bear River Basin Authority (DWR, 1994, p. 376).

Numerous flood control and water conservation districts include among their responsibilities the protection of watercourses and watersheds from flood and

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storm waters. The Contra Costa County Flood Control and Water Conservation District includes this as one of its purposes along with participating in the NPDES program (DWR, 1994, p. 151). Watercourse and watershed protection from flood and storm waters is also a specified purpose for the Lake County Flood Control and Water Conservation District (DWR, 1994, p. 192), the San Bernadino County Flood Control District (DWR, 1994, p. 299), the San Joaquin County Flood Control and Water Conservation District (DWR, 1994, p. 312), the San Luis Obispo County Flood Control and Water Conservation District (DWR, 1994, p. 315), and the Santa Barbara County Flood Control and Water Conservation District (DWR, 1994, p. 320).

While water quality is not specifically stated in relation to the watershed protection from flood and storm water purpose, other flood control districts have provided more specifically for water quality management in their authorities. The Del Norte County Flood Control District is authorized to prevent the unlawful pollution of water (DWR, 1994, p. 162). The Orange County Flood Control District includes among its authorized purposes water quality monitoring, and control and enhancement of water quality (DWR, 1994, p. 248). Additionally, the San Mateo County Flood Control District includes in its authorities the prevention of pollution or diminution of the water supply (DWR, 1994, p. 318).

The authorities and purposes of water agencies vary and not all provide specifically for drainage or water quality management. The Natural Heritage Institute (NHI) prepared a report for the San Joaquin Valley Drainage Program in 1990 entitled Legal and Institutional Structures for Managing Agricultural Drainage in the San Joaquin Valley: Designing a Future. The focus of this report was on addressing salt and trace metal contamination in the San Joaquin River and Tulare Basin, but the analyses and recommendations could have applicability relative to pesticide contamination in surface waters. The report noted that institutional responsibility for drainage management is diffuse and ambiguous, but that the enabling acts for districts do grant express legal authority for districts to provide drainage services. (NHI, 1990, pp. I-2 to I-3.) The report concluded that water supply districts seemed best suited to take a lead role on drainage management for a number of reasons, some of which include:

- The districts are in the best position to implement source control, given they are the dominant suppliers of irrigation water.*
- The districts can promote uniform improvements in irrigation practices on the farm.*
- The local districts are better able than the water development or regulatory agencies to tailor drainage solutions to the local variables.*
- The active cooperation of the districts and growers will be indispensable to a stable solution. That cooperation is most likely to occur if the districts, rather the federal or state agencies are given control over drainage management. (NHI, 1990, pp. I-3 to I-4.)*

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NHI noted that the district acts should be amended by the legislature to clarify that as an integral part of their purpose and mission, the districts have legal responsibility to reduce, control and provide for the disposal of drainage waters according to laws and regulations governing the fate of these waters in the environment; that the amendments vest legal liability for drainage management in the districts; and that the choice of means be left to the districts themselves, subject only to their achieving performance requirements imposed by the regulatory bodies that govern disposition of drainage contaminants in the environment. (NHI, 1990, p. I-4.)

In 1992 legislation was enacted which authorized nearly all local water services agencies to adopt groundwater management plans and implement a groundwater management program for basins not already being managed. (Wat. Code, § 10750, et seq.) Among numerous features, groundwater management plans could include regulation of the migration of contaminated groundwater. (Wat. Code, § 10753.7, subd. (c).) (CVRWQCB, 2002, pp.26 –29.)

Districts could be subject to waste discharge requirements. The following is an excerpt from an Office of Chief Counsel memorandum dated 30 June 1999 discussing Regional Board authority to regulate groundwater recharge. While the subject of that memorandum is not directly on point here, portions of the analysis are applicable.

The State Board is charged with formulating and adopting state policy for “water quality control.” (§13140.) “Water quality control” is defined as “the regulation of any activity or, factor which may affect the quality of the waters of the state and includes the prevention and correction of water pollution and nuisance.” (§13050, subd. (i).) The terms “any activity or factor” are obviously very broad in scope.

“Pollution” is defined in Water Code section 13050, subdivision (1) as “an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: (A) The waters for beneficial uses, (B) Facilities which serve these beneficial uses.” This use of the term “waste” brings us back to the main issue already raised, which is whether or not natural waters can be considered “waste” subject to the State and Regional Boards’ regulatory control.

The regional boards are charged with establishing “water quality objectives.” (§13241.) “Water quality objectives” are defined as “the limits or levels water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.” (§13050, subd. (h).) The terms “water quality constituents or characteristics” are also very broad in scope.

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Consistent with this broad statutory language, the Attorney General has opined that a human activity that acts to move water from one source and depositing it in another can result in a discharge subject to regulation as “waste,” even if the moved water is unaltered. (43 Cal.Ops.Atty.Gen. 217 (1964).) In that analysis, a hydroelectric plant proposed to take water from one water body, which seasonally included high levels of naturally occurring silts or “fines,” and to deposit that water into another water body with a different silt regime. The Attorney General opined that the proposed activity could create “conditions of pollution” in the receiving water, and fell under the definition of “waste.”¹ (Id., at p. 303.) It did not matter that the silts were not of human origin, but naturally occurring in the water before the human action of moving the water to another water body.

Similarly, in 1981, a California Appellate Court addressed the question of whether a nuclear power plant could be required to treat water that was taken from one water source and, unaltered, expelled in a different water body. (*Southern Cal. Edison v. State Water Resources Control Bd.* (1981) 116 Cal.App.3d 75 1 [172 Cal.Rptr. 306].) The Court found that, despite the fact that the plant did not add any of its own pollutants to the water in the process, it could be required to treat the water before discharging it to less polluted receiving waters. (*Id.*, at p. 758.) The Court based its ruling in part on the broad language of Water Code section 13050, subdivision (i), investing in the Board the broad authority to regulate “*any activity or factor* which may affect the quality of the waters of the state. [Citation omitted.] This language clearly grants the power to impose gross limitations on pollutant discharge where necessary to safeguard the quality of the receiving water.” (*Id.*, at p. 758, emphasis in original.)

Finally, in 1989, another California Appellate Court found that a water district was properly subjected to a regional board’s discharge requirements governing the release of sediment from a dam. (*Lake Madrone Water Dist. v. State Water Resources Control Bd.* (1989) 209 Cal.App.3d 163 [256 Cal.Rptr. 894].) The Court based this decision, in part, on its conclusion that the sediment discharge was “‘associated with human habitation’ within the meaning of subdivision (d) of section [Water Code] 13050” because the sediment concentration was a result of the dam, which was built by humans. (*Id.*, at p. 169.)

¹ The legislative history of the Act indicates that the Attorney General’s opinions interpreting “waste” under the Dickey Act, the predecessor to the Porter-Cologne Act, were intended to be incorporated in the definition of “waste” under the Porter-Cologne Act. (See memo by Craig Wilson, dated November 26, 1980, footnote 1, pp. 1-2.)

(State Water Resources Control Board, Office of Chief Counsel,
Memorandum to Division of Clean Water Programs, 30 June 1999.)

Water districts in some areas appear to be organizing and planning to participate and/or take leadership roles in “groups” for purposes of the waiver. Staff is not recommending

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at this point that waste discharge requirements be issued to districts where authorized. Efforts that districts have initiated to address the waiver conditions should be allowed to progress.

Joint Powers Authority

Government entities in California can establish formal methods of cooperation through a mechanism called a Joint Exercise of Powers Authority (JPA). A JPA can be used by public agencies, including districts, to perform almost any function within the joint authorities of the agencies. Such agreements can be a contractual delegation of authority (empowering an agency to act on behalf of the other parties) or provide for the creation of a new entity to carry out the goals of the agencies party to the JPA. An advantage of JPAs is that they can provide a structure for conducting a range of activities through an independent entity, while leaving internal structure and procedural operations of participating districts intact, eliminating the need for reorganization of districts which might otherwise be needed to address specific functions or activities. (NHI, 1990, appendix C, p. 2.)

An example is the San Luis & Delta-Mendota Water Authority (SLDMWA), established in January of 1992. It consists of 32 water agencies representing approximately 2,100,000 acres of federal and exchange water service contractors within the western San Joaquin Valley, San Benito and Santa Clara counties. A primary purpose of establishing the SLDMWA was to assume the operation and maintenance responsibilities of certain United State Bureau of Reclamation (USBR) Central Valley Project facilities, with the goal of managing the facilities more efficiently and at a lower cost than the USBR. The SLDMWA also develops, provides and disseminates information to legislative, administrative and judicial bodies on a variety of issues such as: Sacramento and San Joaquin Delta water exports, water supply, water quality, water development, conservation, distribution, drainage, contractual rights, surface and groundwater management. The SLDMWA also played an instrumental role in the December 15, 1995, Bay-Delta Accord and developing legislation passed in 1996 by California voters as Proposition 204 - The Safe, Clean, Reliable Water Supply Act. (SLDMWA, 2002.)

The SLDMWA is a participant in the Grassland Bypass Project. This project involves the coordination and cooperation of multiple state and federal entities with overlapping authorities, interests or activities, including USBR, U.S. Fish and Wildlife Service (USFWS), U.S. Geological Survey (USGS), USEPA, CVRWQCB, California Department of Fish and Game (CDFG), and the SLDMWA. The SLDMWA is responsible for controlling agricultural drainage water flows to and from the bypass, the CVRWQCB sets and enforces water quality regulations, and the USBR, as owner of the bypass, is responsible for decisions regarding the use of the facility and compliance with Use Agreement No. 6-07-20-w1319, signed on November 3, 1995, between USBR and the SLDMWA. An oversight committee comprised of representatives from USBR, USFWS, CDFG, CVRWQCB, and the USEPA assists with decisions regarding the

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project and evaluates all operations of the project including monitoring and compliance with selenium load reduction goals. Sediment and water quality monitoring, biota sampling and toxicity testing are carried out or overseen by project participants. (SFEI, 2002.) (CVRWQCB, 2002, p.29.)

County Agricultural Commissioners

The County Agricultural Commissioners (CACs) address aspects of various regulatory programs on a local basis (e.g., pesticide regulation, air quality regulation). Given the local linkages and authorities relative to pesticide use, CACs can be key partners or lead entities for groups working on meeting the waiver conditions. Additionally, growers rely upon CACs for information relative to regulatory programs and typically meet individually with their CAC on an annual basis. As such, the CACs can be a good means of getting information on the conditional waiver program directly to the growers. Given resource constraints, additional duties undertaken by CACs would most likely need to be supported with funding. The following are three excerpts from the *Draft Program of Implementation Report for the Control of Diazinon in the Sacramento and Feather Rivers* relative to various CAC pesticide regulatory authorities.

Excerpt on some general authorities:

In 1991, California's environmental authority was unified in a single Cabinet-level agency — the California Environmental Protection Agency (Cal EPA). This brought the Air Resources Board, State Board, and Integrated Waste Management Board under an umbrella agency with the newly created Department of Toxic Substances Control and Office of Environmental Health Hazard Assessment. As part of this reorganization, the pesticide regulation program was removed from the California Department of Food and Agriculture (CDFA) and given departmental status as the Department of Pesticide Regulation (DPR) within Cal EPA. All pesticide-related statutory responsibilities and authorities were transferred to DPR with the exception of the Biological Control Program and the pesticide residue laboratory, which remained with CDFA, and local enforcement duties, which are under the County Agricultural Commissioners. (DPR, 2001, p. 12.)

DPR's oversight of pesticide regulation begins with product evaluation and registration (pursuant to FAC, division 7); and continues through regulation of pest control operations (pursuant to FAC, division 6, which includes statewide licensing of private applicators, commercial applicators, dealers and consultants); environmental monitoring; and residue testing of fresh produce. Their work is augmented by approximately 400 biologists working for County Agricultural Commissioners (CACs) in all 58 counties on local pesticide enforcement. (DPR, 2001, p. 1.)

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Where the FAC places joint responsibility for the enforcement of laws and regulations on the Director of DPR and CACs, the CACs are responsible for local administration of the enforcement program. (Food & Agr. Code, § 2281.) The Director of DPR is responsible for overall statewide enforcement, and issues instructions and makes recommendations to the CACs that govern the procedures CACs follow in the discharge of their duties. Further, the director furnishes assistance in planning and otherwise developing an adequate county enforcement program, including uniformity, coordination, training, special services, special equipment, and forms, statewide publicity, statewide planning, and emergency assistance.

Additionally, FAC, division 6 provides that a CAC may adopt regulations applicable in his or her county supplemental to those of the Director of DPR that govern the conduct of pest control operations and records and reports of those operations. The regulations must be filed with, and approved by, the Director of DPR before they become operative.¹¹ (Food & Agr. Code, § 11503.)

¹¹ “The director, in his or her review of the commissioner's regulations, shall consider, but not be limited to considering, the necessity, authority, clarity, and consistency of the regulations, as defined in Section 11349 of the Government Code.” (Food & Agr. Code, § 11503.)

(CVRWQCB, 2002, pp.15-16.)

Excerpt on authorities related to restricted materials:

In addition to licensing and certification requirements, persons possessing or using a restricted material must also obtain a permit from the CAC, except for certain exceptions provided in FAC section 14006.6. (Food & Agr. Code, § 14006.5.) These permits must comply with the uses designated with the product's registration, unless approval of the director is obtained. Further, no permit can be granted if the commissioner determines that the following subdivisions of FAC section 12825 would be applicable to the proposed use:

- a) That has demonstrated serious uncontrollable adverse effects either within or outside the agricultural environment.
- b) The use of which is of less public value or greater detriment to the environment than the benefit received by its use.
- c) For which there is a reasonable, effective, and practicable alternate material or procedure that is demonstrably less destructive to the environment.

FAC section 14006.5 further provides that each permit issued for any pesticide must include conditions for use in writing and that before issuing a permit for any pesticide the commissioner shall consider local conditions including, but not limited to, the following:

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- a) Use in vicinity of schools, dwellings, hospitals, recreational areas, and livestock enclosures.
- b) Problems related to heterogeneous planting of crops.
- c) Applications of materials known to create severe resurgence or secondary pest problems without compensating control of pest species.
- d) Meteorological conditions for use.
- e) Timing of applications in relation to bee activity.
- f) Provisions for proper storage of pesticides and disposal of containers.

Regulations require the CAC to determine if a substantial adverse health or environmental impact will result from the proposed use of a restricted material. If the CAC determines that this is likely, the CAC may deny the permit or may issue it under the condition that site-specific use practices be followed (beyond the label and applicable regulations) to mitigate potentially adverse effects. DPR provides commissioners with information in the form of suggested permit conditions, which reflect minimum measures necessary to protect people and the environment. The commissioners use this information and their evaluation of local conditions to set site-specific limits on applications. To maintain CEQA equivalency, CACs must have flexibility to restrict use permits to local conditions at the time of the application. Therefore, the CACs may follow the DPR-provided guidelines, or may structure their own use restrictions. (DPR, 2001, pp. 48-49.)

A permit is not required for the agricultural use of any pesticide not designated as a restricted material **unless** the commissioner determines that its use will present an undue hazard when used under local conditions. (Food & Agr. Code, § 14006.6, emphasis added.)

FAC section 14007 provides that permits are conditional upon compliance with the FAC and the regulations promulgated to carry out FAC provisions, along with any other conditions that are required to carry out the purposes of laws specific to restricted materials (See Food & Agr. Code, division 7, chapter 3.) These permits are issued on an annual basis, but can be issued up to a three-year period for perennial agricultural plantings (“permanent crops” such as vines and trees), nonproduction agricultural sites, or nonagricultural sites. (Food & Agr. Code, § 14007.) Any permit may be refused, revoked, or suspended for permit condition violations, for violation of applicable statutes or regulations, the failure to pay a civil penalty or comply with any lawful order of the commissioner, once that order is final.^[1] (Food & Agr. Code, § 14008.)

The CAC must be notified at least 24 hours prior to commencing the use of a pesticide requiring a permit. The notice of intent to apply a restricted material may be submitted to the CAC by the operator of the property to be treated, by

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such operator's authorized representative, or by the licensed pest control operator who is to apply the pesticide.^[18] (Cal. Code Regs., tit. 3, § 6434.) A pesticide use report must be submitted to the CAC within seven days after each use of a restricted material. (Food & Agr. Code, §14011.5.) Copies of the pesticide use reports received pursuant to FAC section 14011.5, and any other relevant information the director may require must be submitted by CACs to the Director of DPR within one calendar month after they are received. (Food & Agr. Code, § 14012, subd. (b).)

¹ FAC section 14009 provides that any interested person may request the commissioner to review his or her action in issuing, refusing, revoking, suspending, or conditioning a permit to use or possess a restricted material.

² The commissioner may allow less than 24 hours notice if he determines that because of the nature of the commodity or pest problem effective pest control cannot be attained or when 24 hours are not necessary to adequately evaluate the intended application.

(CVRWQCB, 2002, pp.21-23.)

Excerpt on authorities related to enforcement:

Enforcement options are authorized in multiple chapters of divisions 6 and 7 of the FAC. The following are relevant excerpts from Regulating Pesticides: The California Story, DPR, October 2001, which provides a thorough and concise summary of enforcement and compliance options available to DPR and the CACs:

“The legal authority for the pesticide regulatory program is found primarily in Divisions 6 and 7 of the Food and Agricultural Code. These legal provisions and the regulations adopted pursuant to them give DPR, the CACs, or their respective representatives, broad authority to access private property for enforcement activities such as audits, inspections, investigations, sampling, or testing. These laws also authorize DPR and the CACs to discipline violators through various types of sanctions and to protect the public by prohibiting or stopping hazardous activities.

“Enforcement tools include:

- Administrative civil penalties initiated by a CAC or by DPR.
- Refusal, revocation, or suspension of county registrations or licenses and certificates issued by DPR and a CAC.
- Civil and criminal court actions initiated by DPR (through the Attorney General) or local prosecutors.
- Cease-and-desist orders issued by DPR or a CAC.
- Crop seizures issued by DPR (allows seizure and destruction of agricultural commodities or sites treated with a pesticide not registered for use on that commodity or site).

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“Administrative actions: DPR can refuse, revoke or suspend the right of a pest control operator’s or maintenance gardener’s business license to perform pest control, and a pesticide dealer’s business license to sell pesticides. Pest control advisers, licensees and certificate holders who use pesticides are also subject to these administrative actions.

“County Agricultural Commissioners have the authority to refuse, revoke or suspend the registrations of pest control operators and maintenance gardeners to use pesticides and that of pest control advisers to make pesticide recommendations.

“In 1985 (Chapter 943, AB 1614) commissioners were granted authority to levy agricultural civil penalties. Commissioners may fine any pesticide user, adviser, or dealer up to \$1,000 per violation of specified sections of the Food and Agricultural Code. In 2000, commissioners were given the authority to refuse, suspend or revoke permits of individuals who disregard fines or lawful orders (Chapter 806, SB 1970).

“In 1989, DPR was granted limited authority to levy civil penalties (Chapter 843, AB 1873). DPR’s authority at that time was restricted to violations of law prohibiting the sale of unregistered or mislabeled pesticides, and those prohibiting the packing, shipping or selling of produce containing illegal pesticide residues. In 2000, legislation (Chapter 806, SB 1970) expanded that authority to allow DPR to levy civil penalties for serious cases resulting from priority investigations or multi-jurisdictional violations that cannot be handled by a single CAC. DPR-imposed civil fines can range as high as \$5,000 per violation.

“If DPR and County Agricultural Commissioners believe civil penalties are not warranted, they have an option of obtaining compliance through violation notices, compliance interviews, and warning letters. These less severe actions are generally used to document first-time, nonsubstantive violations. In addition, they can issue “cease and desist” orders to halt activities that may create a hazard involving the use of pesticides in violation of laws or regulations.

“Criminal and civil actions: Criminal and civil actions can be taken against licensees, certificate holders, permittees, and other pesticide users. These actions can also be taken against pest control advisers, sellers and manufacturers of pesticides. The State Attorney General or a county district attorney can file civil actions. Criminal penalties range from a minimum of \$500 and/or not more than six months of imprisonment, to \$50,000 and/or imprisonment of one year for offenses involving intentional or negligent violations that created a hazard to human health or the environment. Civil complaints can be filed only by the State Attorney General. Penalties range from \$1,000 to a maximum of \$25,000. Criminal and civil proceedings are considered instead of agricultural or structural civil penalties for repetitive or intentional violations, or violations that have

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created a hazard to human health or the environment.” (DPR, 2001, pp. 50, 52.)
(CVRWQCB, 2002, pp.23-24.)

Some entities could or should be identified as “Dischargers.” Some of these “entities” could or should be directly involved in meeting terms and conditions of the Conditional Waiver. A matrix of these entities is provided in **Attachment E**.

Structured Watershed Groups

An alternative approach to that presented in the existing Conditional Waiver would be to require structured Watershed Groups to be formed and hold these groups accountable for the action or inaction of the Dischargers they represent. Regional Board staff have developed criteria, which outlines the requirements of a structured Watershed Group approach. This criterion is provided in **Attachment F** of this Staff Report.

Alternatives:

Option No. 1 – Do not revise the Conditional Waiver to add conditions related to more structured requirements for Watershed Groups and their operations. Provide additional findings and conditions to clarify to roles and actions of Watershed Groups and individual Discharger.

Option No. 2 – Revise the Conditional Waiver to add conditions related to requiring a structured Watershed Group represent Dischargers as outlined in **Attachment F**.

Staff Recommendation:

Option No. 1. Waiver conditions should focus on information and activities, and groups should have flexibility in determining the structure and operations that will best serve their needs in meeting waiver conditions. The proposed Conditional Waiver addresses this recommendation.

2.C Should Watershed Groups be responsible for compliance with the conditions of the Waiver as a Discharger?

Discussion:

The Regional Board’s regulatory authority is triggered by discharges of waste that could affect the quality of waters of the state. The Porter-Cologne Act provides that, “[a]ny *person* discharging or proposing to discharge *waste* that could affect the quality of the *waters of the state*” must file a report of waste discharge. (Wat. Code §13260(a)(1), italics added.)

“Person” is broadly defined and in addition to individuals, “includes any city, county, district, the state and the United States, to the extent authorized by law” (Wat. Code §13050(c).)

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The definition of “waste” includes “sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.” (CWC § 3050(d).) “Waste” includes irrigation return flows and drainage water from agricultural operations. (See 27 Ops.Cal.Atty.Gen. 182 (1956); 43 Ops.Cal.Atty.Gen. 302, 304 (1964); 48 Ops.Cal.Atty.Gen. 30, 34 (1966).)

“Waters of the state” is also broadly defined in the Porter-Cologne Act and includes, “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code section 13050(e).) As outlined in an Office of Chief Counsel memorandum:

“In 1966, the Attorney General issued an opinion that concluded that such waters include all waters within the boundaries of the state, whether private or public, in natural or artificial channels. See 48 Ops. Cal. Atty. Gen. (1966) 30, 34-35. This opinion was requested by the Colorado River Basin Regional Board with reference to waters in an irrigation system. The opinion concluded that all waters in an irrigation system constituted “waters of the state.” An “irrigation system” was defined to include all waters diverted into constructed canals, and not just drainage waters that were tributary to a stream or lake. The opinion was based upon principles of statutory construction, legislative history and intent, and judicial opinions interpreting the term “waters of the state” in analogous statutes. Recent case law has cited the 1966 Attorney General’s opinion with approval. See *People ex rel. Lungren v. Superior Court* (1996) 14 Cal.4th 294 and *People v. General Motors* (1996) 51 Cal.Rptr.2d 651.” (State Water Resources Control Board, Office of Chief Counsel, Memorandum to Central Valley Regional Water Quality Control Board – Fresno Office, 5 June 2001.)

Watershed Groups generally do not “discharge wastes” as contemplated in the Porter-Cologne Act, although members of such groups may discharge waste. As stated above, individual Dischargers, including farm companies, partnerships, and water districts, are “persons” and frequently do discharge wastes subject to the Porter-Cologne Act.

As presented in the existing and proposed Conditional Waiver, Watershed Groups are “Dischargers”. However, this identification is made as a result of the Groups agreeing to representation of individual “Dischargers” for the purposes of compliance with the terms and conditions of the Conditional Waiver. That representation has requirements that must be met as conditions of the Conditional Waiver. The Conditional Waiver does not require the Watershed Groups to be held accountable for the action or inaction on the part of an individual Discharger to protect or improve water quality. The Watershed Groups do have the responsibility to: monitor and document water quality conditions, assess and report those conditions, document management practices, and document the success and failure of those management practices to protect and/or resolve water quality impacts.

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The individual Dischargers, whether they are in a Watershed Group or not, are required to manage their discharges in a way to protect and/or improve water quality under the Conditional Waiver.

Staff is aware that some Watershed Groups are concerned that they will be required to take on a regulatory role under the conditions of the Conditional Waiver. Watershed Groups do not have the authority and cannot be delegated the authority or the role and responsibility of the Regional Board for the purposes of ensuring compliance with this Conditional Waiver, the Regional Board's plans and policies or the Water Code.

Watershed Groups should be used to conduct water quality monitoring, report, management practice identification, track implementation and effectiveness of management practices, and prepare annual reports.

Alternatives:

Option No. 1 – Refine role and responsibility of Watershed Groups and individual Dischargers in the proposed Conditional Waiver.

Option No. 2 – Revised Conditional Waiver to require Watershed Groups to be accountable for discharges that impact water quality from the individual Dischargers they represent.

Staff Recommendation:

Option No. 1 – Proposed Conditional Waiver provides additional detail on what conditions Watershed Groups and individual Dischargers must meet. The proposed Conditional Waiver requires that the individual Dischargers implement management practices to protect and improve water quality.

3. Should the Dischargers pay fees?

Existing Conditional Waiver:

“...that the Regional Board waives the submittal of a report of waste discharge and waste discharge requirements for discharges from irrigated land if the discharger complies with the ‘Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands Pursuant to California Water Code Section 13269’ ...”

Water Code Section 13260 requires that the Discharger submit a fee with each report of waste discharge (ROWD). If the requirement to submit an ROWD is waived then the fee is not required. The existing Conditional Waiver waives the requirement to submit an ROWD, and therefore, no fees are required. The State's General Fund currently provides funding for the Irrigated Lands Waiver program.

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Agricultural Position:

Farmers are price takers. They have no means of passing these costs on to consumers so fees would place an undue hardship on growers. Some farmers may be forced out of business.

Environmental Position:

The polluter-pays principle should apply to agricultural activities just like it does to any other industry.

Considerations:

- The regulation of discharges of waste from irrigated lands is an immense undertaking for staff and is required by the Porter-Cologne Act. The 5 December 2003 staff report stated there are more than 25,000 individual Dischargers. Use of a waiver provides for some efficiency in regulation, but it still requires considerable staff effort.
- Currently, no fees are collected to cover staff costs for regulation of discharges from irrigated lands.
- Fees would recoup some or all of the administrative costs.
- Agriculture is a business and should be required to pay regulatory fees just like any other business in the Central Valley that discharges waste to waters of the State.
- Title 23 California Code of Regulations (CCR), Section 2200 establishes the fee structure. The Porter-Cologne Act requires discharges to pay a fee upon submittal of a report of waste discharge. That fee becomes an annual fee unless WDRs are waived. Where ROWD are required, but WDRs are waived, the Regional Board may retain the amount of the fee necessary to cover staff time to review the ROWD. Staff time and activities must be tracked to document time spent in reviewing a ROWD so that the excess in fees is refunded to the Discharger.
- There is currently no legal authority to collect fees when ROWDs and WDRs have both been waived.
- The Regional Board can and has required submittal of a ROWD and a filing fee and waived WDRs for some types of discharges.
- Due to the recent passage of AB 10X, the State Board has established a committee to draft revised fee regulations. Central Valley Region staff participate on this committee and will provide input to address the need for fees to support the Irrigated Lands program.

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Discussion

For a number of years, Regional Board regulatory activities that rely on General Funds have been under funded resulting in lengthy permitting processes, smaller special studies, inadequate basin planning resources, etc. The Regional Board has just experienced significant General Fund reductions, including reductions in the Agricultural Regulatory Program. Continued General Fund support cannot be assured or assumed.

In signing AB10x Governor Davis stated in regard to General Fund budget reductions

"... I have reduced \$28.5 million in General Fund appropriations to the SWRCB and asked the regulated community to contribute an additional \$14.9 million to protect California's water quality and the public health. It is only fair that those who contribute to California's air and water pollution bear a greater share of the cost of regulatory activities to achieve clean, healthful air and water quality.

I am directing the SWRCB and ARB to conduct a public process that invites participation of all affected stakeholders in the development of their regulatory fee schedules. As prescribed by AB 10X, expenditure of the fees must be related to the activities of those paying the fees and should not exceed the reasonable and necessary costs of these agencies to implement their respective programs as appropriated in the Budget Act.

I further urge the SWRCB and ARB to carefully balance the threat to water and air quality with any additional economic burdens placed on California small businesses, public agencies, and agriculture when developing their fee schedules. For the ARB, that means the fees from stationary sources, consumer products, and architectural coatings should not exceed a combined total of \$13 million in the budget year.

In signing this legislation, I am keenly aware of the potential burden increased fees could have on fee payers. At the same time, it is essential that both the SWRCB and ARB receive the funds necessary to continue our vital air and water quality protection programs."

Staff anticipate that all of the general funds supporting this program may need to be replaced by new fees or increased fees collected from Dischargers. The State Board has recently raised fees to address the loss of general funds. In order to assure that an Irrigated Lands Conditional Waiver Program is viable over the next two years and into the future, a fee based funding mechanism must be implemented.

The State Board fee schedule is attached, **Attachment G**. That schedule contains fees for various types of discharges, including categories for the discharge of waste to land, for storm water permits, and for NPDES permits. Fees that would be imposed for the

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Irrigated Lands Conditional Waiver Program would fall under the discharge of waste to land category for non-Title 27 discharges. Irrigated lands discharge to both land and/or surface waters, which are waters of the State. Fees for this category are based on threat and complexity. The Regional Board does not determine the amount of the fee for the categories, but does determine the threat and complexity, and therefore, which fee applies to a particular Discharger.

The following are some options for funding the Irrigated Lands Conditional Waiver Program.

Option No. 1 - Do not require fees

Options No. 2 - Require ROWDs and a fee. The fees on the current fee schedule range from \$400 to \$20,000. The Discharger would submit the fee based on the regulations as determined by the Regional Board. If WDRs are waived after submittal of the ROWD, some of the fee could be refunded. If WDRs are required (or the discharge is covered under General WDRs), the Discharger would pay an annual fee. No distinction will be made between large and small dischargers. Watershed Groups would have to develop separate funding. If 10% of the estimated 25,000 dischargers apply for the Conditional Waiver, this would generate \$1,000,000 (2500 x \$400) per year. This would maintain the program at about its current staff level, not including contract work. Action: Revise the Conditional Waiver to require the submittal of ROWDs and fees.

Option No. 3 - Require ROWD or a Notice of Intent (NOI) and a filing fee as conditions of the Conditional Waiver. Discharger would submit the NOI and filing fee based on the regulations as determined by the Regional Board. A distinction can be made between large and small dischargers. The complexity of the NOI would determine the amount of the filing fee based on Title 23 California Code of Regulations Section 2200. Irrigated Lands discharge to both land and surface water and are subject to the existing fee schedule. The State Board may revise this schedule to more specifically address agricultural discharges of various types. Watershed Groups would have to develop separate funding. Action: Revise the Conditional Waiver to require the submittal of ROWDs and filing fees based on a stepped scale considering the complexity of the NOI.

Option No. 4 – Seek amendments to the Porter-Cologne Act and/or fee regulations to provide more flexibility in assessing fees

Where an ROWD or NOI is required, it must be accompanied by a fee specified in the fee schedule. The filing of a ROWD or NOI and filing fee is already provided for in Porter-Cologne and would not require a change in the law. If the Regional Board revises the Conditional Waiver to require the submittal of a ROWD or NOI then it can also require the submittal of a filing fee. The filing fee amount must be based on a Threat and Complexity rating based on the information available to the Regional Board. The Regional Board must refund the amount of filing fee that exceeds the time needed to

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review the ROWD or NOI and determine whether the Discharger is eligible for the Conditional Waiver.

The filing or annual fees are based on threat and complexity of the discharge. Discharges of waste from irrigated lands occur to both land and surface water and vary in their threat and complexity. Factors considered in determining threat and complexity include whether discharges could impair the designated beneficial uses of the receiving water, cause violations of water quality objectives, cause violations of drinking water standards, or cause a nuisance and whether dischargers must comply (may already) with best management practices or use passive treatment and disposal systems. It would be appropriate to classify discharges that cause such impacts as Category "II-C". The filing fee for a II-C discharge is \$2,025.

Dischargers that minimize the use of or do not use chemicals (pesticides, fertilizers), discharge from smaller fields, do not irrigate, only discharge stormwater, and/or implement effective sediment control measures generally pose a lower threat to water quality. It would be appropriate to assign such discharges a Category "III-C". The filing fee for a III-C discharge is \$400.

Staff's estimated costs associated with the review of a complete ROWD or NOI, based on staff's experience in reviewing ROWDs or NOI associated with the Non Chapter 15 – Waste Discharge to Land Program, are provided in Table 1 below. Table 1 lists the tasks and estimated costs expected to be required to review a ROWD for Category II-C and determine if the discharge complies with the Conditional Waiver or will require WDRs.

Table 1: Category II-C Costs Estimates

Task¹	Cost²
Receipt of ROWD and fee and input into data system	\$100
Review of ROWD Submittal, Step One (General Report - Watershed Group, Individual Discharger)	\$150 - \$300
Review of ROWD, Step Two (Detailed Report - Watershed Description and Monitoring Plan, BMPs)	\$350 - \$1,000 +
Review of ROWD, Step Three (Implementation and Funding Plan)	\$250 – 600
Inspection of Watershed/Farm	\$500 - \$2,000
Total	\$1,350 - \$4,000+

¹ Tasks assumes a complete ROWD or NOI submitted in three steps as outlined in the existing Conditional Waiver.

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² Costs estimated are based on the hourly rate of \$50 as required by Title 23 California Code of Regulations Section 2200.4. Note that \$50 does not cover staff costs. For cost recovery programs, the Regional Board's hourly rate averages about \$90, which covers the staff's direct pay, benefits, and overhead.

As shown by this table, the estimated costs associated with the review of a complete ROWD or NOI may recover all or a portion of the costs for the Category 2C type discharges.

The following table is an estimate of the costs associated with the review of a complete ROWD for a Category III-C "low threat" discharge.

Table 2: Category III-C Costs Estimates

Task¹	Cost²
Receipt of ROWD and fee and input into data system	\$100
Review of ROWD Submittal – Notice of Intent	\$250
Review of ROWD –Detailed Report – Monitoring Report, flow, QA/QC	\$150
Total	\$500.00

¹ Tasks assumes a complete ROWD or NOI submitted in two steps as outlined in the existing Conditional Waiver.

² Costs estimated are based on the hourly rate of \$50 as required by Title 23 California Code of Regulations Section 2200.4. Note that \$50 does not cover staff costs. For cost recovery programs, the Regional Board's hourly rate averages about \$90, which covers the staff's direct pay, benefits, and overhead.

As shown by this table, the estimated costs associated with the review of a complete ROWD or NOI may not recover all of the costs for the Category III-C type discharges.

In addition, staff expect that a Watershed Group ROWD or NOI to be very detailed and complex. This is due to the large area, number of Dischargers, variety of water quality issues that may exist within the watershed, monitoring and reporting requirements and the number of meetings that may be required to complete the review of the ROWD or NOI.

Staff propose to define Category I-C, II-C and III-C discharges as follows so that the Watershed Group or individual Discharger can identify the appropriate filing fee at the time the ROWD or NOI is submitted to the Regional Board.

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Table 3: Filing Fee Category for specific Dischargers and Discharges

Type of Discharger or Discharge	I-C	II-C	III-C
Watershed Group NOI	X		
District Group NOI (>2)	X		
Mutli-Farm Group NOI (>10)		X	
Districts which have operational spills or otherwise discharge		X	
Farms > 200 acres		X	
Farms ≤ 200 acres			X
Organic Farms > 500 acres		X	
Organic Farm ≤ 500 acres			X
Nurseries > 10 acres		X	
Nurseries ≤ 10 acres			X
Farms that discharge only stormwater			X

At the time that the Conditional Waiver was adopted, the NOI filing fee for Category I C is \$6,750. The filing fee for Category II C is \$2,025. The filing fee for Category III C is \$400. The State Board may revise these fees by amending the applicable regulations.

If an individual Discharger is participating in a “Watershed Group” for the purposes of complying with the terms and conditions of this Conditional Waiver, the Watershed Group identifies the individual Discharger as part of the Watershed Group, and the Watershed Group has filed a complete NOI and filing fee with the Regional Board, the individual Discharger is not required to file a NOI and submit a filing fee with the Regional Board.

Specific CWC sections are provided below regarding the submittal of the ROWD and filing fee.

13260. “(a) All of the following persons shall file with the appropriate regional board a report of the discharge, containing the information which may be required by the regional board:

(1) Any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.”

13260. “(b) No report of waste discharge need be filed pursuant to subdivision (a) if the requirement is waived pursuant to Section 13269.”

13260. “(e) Each report of waste discharge for a new discharge submitted under this section shall be accompanied by a fee equal in amount to the annual fee for the

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discharge. If waste discharge requirements are issued, the fee shall serve as the first annual fee. If waste discharge requirements are waived pursuant to Section 13269, all or part of the fee shall be refunded."

Recommendation

Staff recommends Option No. 3 – Require the submittal of complete NOI (ROWD) and filing fee based on a threat and complexity of I-C, II-C and III-C. To implement Option No. 3, the staff have revised the proposed Conditional Waiver to require the submittal of a complete NOI and a filing fee as outlined above.

4. Should the discussion of prioritization be revised?

Existing Conditional Waiver:

"Based on the information available, the Watershed Group shall identify in writing its priorities with respect to work on specific sub-watersheds and constituents."

Agricultural Position:

Base prioritization on input from the Regional Board as well as the efforts of the Watershed Group. Priorities should reflect beneficial uses, impairment of water bodies and data on water quality.

Environmental Position:

Prioritization should not be based solely on known water quality impairments. If the Watershed Group is allowed to determine their own priorities, not all waters of the Central Valley will be protected.

Considerations:

- Revising the prioritization to reflect the agricultural industry position may give the Regional Board greater control over the water quality assessment and management practices in sub-watersheds that may impact Clean Water Act, Section 303(d) listed water bodies or in a TMDL identified watershed or major constituents of concern.
- Staff acknowledged that Watershed Groups may have limited resources to address the tasks required. Prioritization will allow these groups to plan and communicate how resources will be allocated to specific tasks.
- Prioritization should be complete in scope, assuring that emerging or lower threat water quality issues are not ignored but placed on the schedule for action.
- Beneficial uses themselves are not ranked or prioritized in the Porter-Cologne Act, however, certain beneficial uses are affected to a greater degree than other

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uses by the discharges of waste from irrigated lands. It is reasonable and appropriate that Watershed Groups consider existing water quality data and impaired water bodies in their respective watersheds when setting priorities.

- The Condition Waiver should direct the Watershed groups to develop baseline water quality conditions in water bodies within the watershed or a minimum number of sample sites and monitoring of constituents of concerns resulting from discharges from irrigated lands.

Discussion:

The existing Conditional Waiver requires Watershed Groups to plan and communicate how resources will be allocated to specific tasks and to identify the priorities of actions to be taken. Technical assistance in watershed planning is available from a number of agencies, including the State and Regional Boards. Priorities must be identified reports by the Conditional Waiver (due **30 June 2004**), and Regional Board staff will review and provide comment regarding the priorities established, if warranted. Considerations in setting priorities should include, but not be limited to, severity, and temporal and spatial extent of beneficial use impairments; 303(d) listings and TMDL priorities; and evaluation of the information gathered in the watershed assessment (i.e., **30 June 2004** report), including potential change in pesticide use and production practices that can be used to identify potential future water quality impacts. Prioritization should be complete in scope, assuring that emerging or lower threat water quality issues are not ignored but placed on the schedule for action.

The Regional Board should not set all priorities to work on specific sub-watersheds and constituents in a watershed based on the limited resources available to the Regional Board. In addition, at this time, the Regional Board lacks sub-watershed specific information and data, including, but not limited to, land use, soil conditions, crops, chemical use, water sources and uses, management practices, etc.

However, to ensure that general water quality conditions impacted by these discharges are assessed and that data is collected to show that water quality is protected or improved and that beneficial uses are maintained and protect, a minimum number of constituents and monitoring sites should be sampled. Theses sample results should be used to refine priorities and further document water quality protection and improvements.

Alternatives:

Option No. 1 Do not revise the existing Conditional Waiver language regarding priorities.

Option No. 2 Revise Conditional Waiver language to include factors to consider in setting priorities (i.e., considerations include, but are not limited to, severity, and temporal and spatial extent of beneficial use impairments; 303(d) listings and TMDL

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priorities; and evaluation of the information gathered in the watershed assessment, including potential change in pesticide use and production practices to identify potential future water quality impacts) and specify that prioritization should be complete in scope to assure that emerging or lower threat water quality issues are not ignored but placed on the schedule for action. Revise Conditional Waiver to include a Monitoring and Reporting Program that sets a minimum number of monitoring constituents and sample sites.

Option No. 3 Revise Conditional Waiver to require the Regional Board to set all priorities for work on specific sub-watersheds and constituents in that watershed.

Staff Recommendation:

Option No.2. Add the following language to the proposed Conditional Waiver and include and Monitoring and Reporting Program which set a minimum number of monitoring constituents and sample sites.

“Considerations in setting priorities shall include, but not be limited to, severity, and temporal and spatial extent of beneficial use impairments; 303(d) listings and TMDL priorities; and evaluation of the information gathered in the watershed assessment, including potential changing pesticide use and production practices to identify potential future water quality impacts. The list of priorities should be complete in scope, assuring that emerging or lower threat water quality issues are not ignored but placed on the schedule for action.”

5. Should management practice development, evaluation, tracking and enforcement of implementation of Watershed Group management practices be revised in the Conditional Waiver?

Existing Waiver:

“A key responsibility of the watershed groups is the development and promotion of management practices that reduce discharges of waste to acceptable levels. The watershed group will be responsible for monitoring the success of identified management practices through the program’s water quality monitoring program as well as through the evaluation of the management practices. The watershed program should identify a process to adapt the management practices utilized as necessary based upon the monitoring information.

“The watershed program must include a plan for the implementation of management practices. The implementation of management practices should be based on the prioritization required above.

“Each watershed program should identify pilot projects for the implementation of management practices on prioritized sub-watersheds.

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“When monitoring results indicate that water quality improvements are necessary, the watershed group shall submit a report describing how it will evaluate the effectiveness of one or more management practice[s] at preventing release of waste constituents to surface waters. The selection of evaluation projects shall include consideration of contribution of target waste constituents to known water quality impairments, potential application of the management practice over a broad geographic area and large spectrum of crops, and ease and immediacy of possible implementation. Projects need not involve new practices, but can involve quantification of benefits of existing practices. Reports shall be submitted for each proposed, implemented, or completed project which shall include, at a minimum: description of management practice(s) being evaluated, target chemical(s), reasons for selecting the specific project, methodology for evaluating the effectiveness of the practice (including sampling and QA/QC plans), and involvement by stakeholders and agencies in developing, implementing and evaluating the project. If projects are completed, the report shall present the conclusion(s) of the evaluation project.

“Watershed groups may take advantage of management practice development conducted by the University of California or other organizations, as appropriate.”

(From timetable)

Due 30 June 2004: Compilation of existing information and plan addressing development and implementation of management practices.

Due 2005 and subsequent seasons: Management practice evaluation. Continuous following of management practice identification: management practice tracking.

Agricultural Position:

The existing language is too confusing and rigorous. It is inappropriate for the Regional Board to require that Watershed Groups develop, implement or evaluate management practices. The role of the Watershed Group is to encourage their membership to implement appropriate practices but the group will have no ability or authority to enforce this, and most groups will not have the technical expertise to develop new practices.

Environmental Position:

Watershed plans must describe how BMP implementation will be monitored and enforced.

Considerations:

- Language may be needed to clarify the role of the Watershed Group as a group of individual Discharger participants who have the individual

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responsibility to comply with water quality objectives. The group is a convenient structure for accomplishing this efficiently.

- If groups assure implementation of management practices in the watershed, along with tracking implementation and evaluating effectiveness, the information should link water quality problems to noncompliant Dischargers and/or practices that are not as effective.
- Watershed groups have no enforcement authority unless they voluntarily choose to adopt a structure that includes this component.
- The agricultural community has repeatedly taken the stand that management practices must be developed and evaluated for local conditions. Watershed group participants will know more about local conditions than anyone else and thus are appropriate parties to develop and evaluate management practices suited for their respective areas.
- A practice that is beneficial under one set of weather conditions, soil types and cropping patterns may not be beneficial under all conditions. This is why the waiver requires that groups evaluate management practices and encourages adaptations to local conditions. Quantifying water quality improvements resulting from the implementation of management practices will be important for identifying the most effective practices and demonstrating that sufficient progress in improving water quality is being realized to support continued regulation under a conditional waiver.
- The Regional Board may not dictate the manner of compliance but can establish the requirements to be achieved.

Discussion:

Effective waste management practices are the key to protection of water quality. The Conditional Waiver should specify the requirements to be achieved. Management practices should be evaluated based on their effectiveness in protecting water quality. The Dischargers are in the best position to determine what management practices are effective and to control costs. Watershed groups should help in identifying effective management practices, assisting in implementation, and should track the implementation of management practices. Additionally, they should evaluate their effectiveness in protecting the waters of the State, preventing further impairment of water quality problems, and addressing known impairments in their respective watersheds. They must document and evaluate water quality improvements through the monitoring program. Watershed groups and/or the farmers should refine management practice efficacy for site specific or local conditions through an adaptive management process, and where opportunities exist to assist or facilitate development of management practices, they are strongly encouraged to do so. Implementation undertaken to prevent or address water

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quality impairments, and progress in improving impairments must be reported to the Regional Board so it can assess if current waiver conditions are being met and if continued regulation under a conditional waiver can be supported.

This will be an iterative process and one that will not be completed within the two-year time span of the current conditional waiver. As such, implementation (i.e., promotion and tracking of management practice implementation, documentation and evaluation of effectiveness, and refinement through adaptive management) will likely be one of the cornerstones of the ten-year program. Staff recognized that Watershed Groups, as well as individual farmers (Dischargers), will likely need to rely on the technical assistance available through various entities (e.g., UC Cooperative Extension, UC Integrated Pest Management Project, UC Sustainable Agriculture Research and Education Program, United States Department of Agriculture – Natural Resource Conservation Service, local Resource Conservation Districts, commodity groups, etc.).

Watershed groups do not have enforcement authority over implementation of practices of the nature that, for example, the Department of Pesticide Regulation and the Agricultural Commissioners do with pesticide use. However, Watershed Groups could condition membership on reasonable participation. A guiding principle is that implementation of management practices to a nature and degree that will prevent water quality impairments, address known water quality impairments and demonstrate sufficient improvements over a reasonable amount of time will need to be undertaken to support continued regulation under a conditional waiver. Watershed groups will need to determine the best approach for their respective watershed areas. This approach in no way absolves groups or Dischargers of responsibility with respect to management practice implementation since a consequence of failure to implement management practices to a nature and degree that prevent water quality impairments, address known water quality impairments and demonstrate sufficient improvements over a reasonable amount of time would be the inability to support continued regulation under a conditional waiver. Requiring individual implementation plans from all Dischargers would defeat, in part, the purpose of the watershed program approach. Requiring such plans as a condition of the waiver would make the watershed program approach more akin to individual waivers or WDRs. Great benefits can result from developing site-specific implementation plans, but watershed groups will have to determine the appropriate approach for their area and participants. Should a watershed program effort be unsuccessful, a consequence is that higher regulatory oversight on a site-specific basis could be warranted.

Alternatives:

Option No. 1 Do not revise language in the Conditional Waiver.

Option No. 2 Revise the Conditional Waiver to clarify that watershed groups are not being mandated to develop new management practices as a condition of the waiver regardless of monitoring results.

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Option No. 3 Revise the Conditional Waiver to clarify that Watershed Groups must evaluate and report management practices being used to protect and improved water quality and the effectiveness of these practices.

Option No. 4 Revise the Conditional Waiver to require, as a condition, that each individual Discharger represented by a Watershed Group submit to the group, information on existing practices being used in their operations and a site-specific implementation plan for inclusion in the watershed plan.

Staff Recommendation:

Option No 3. Existing language identifies management practice development as a key responsibility of watershed groups, but does not specifically mandate such development as a condition of the Waiver, thus no change is needed for that aspect (Option No. 2). The proposed Conditional Waiver requires the Watershed Groups to identify, monitor and assess the effectiveness of management practices to protect water quality on behalf of the individual Dischargers. The time schedule and Monitoring and Reporting Program specifies that Watershed Groups must submit a compilation of existing information on management practices and a plan addressing development and implementation of practices (if groups are, or plan to be, involved in developing practices, it should be indicated in this plan); management practice tracking and management practice evaluation.

6. Should the Conditional Waiver be revised to provide additional detail on which reports will be reviewed and approved by the Regional Board?

Existing Conditional Waiver:

“To obtain Regional Board approval, the watershed group must conduct certain minimum work and report progress to the Board on a regular basis.”

“The deliverables must be submitted in writing to the Executive officer as specified in the timetable. All submittals must be well organized and complete (professional quality). If submittals are returned with comments from Regional Board staff, watershed groups shall have 30 days to address comments and revise the submittals as necessary.”

“Summary of reports and schedule:

General report	30 June 2003
Watershed description	31 December 2003
Annual reports	30 January
Detailed report and the following:	30 June 2004
• Watershed monitoring plan	
• Prioritization of sub-watersheds	
• Management practices - compilation of existing information, evaluation of management practices, and tracking	

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- Plan addressing development & implementation of management practices, grower education, technical assistance, and financial assistance
- Identification of funding mechanisms”

“Watershed groups will review results of ongoing monitoring conducted by the Regional Board and other agencies. This information, along with historical information, will be used in developing a watershed monitoring plan that will be submitted to the Regional Board for review and approval.”

Agricultural Position:

The Regional Board or staff should review deliverables but the Regional Board should not approve them.

Environmental Position:

Each watershed group proposal (general report) detailed report and annual report must be reviewed and approved or disapproved by the Regional Board. The proposal must articulate the criteria by which the Regional Board will review any of these plans or reports.

Considerations:

- As written, it is not clear which reports will undergo Regional Board review or require Regional Board approval, or at which stages and at what level the public can get involved. Watershed groups and the general public would benefit from knowing at which points public comment will be requested. If the language is revised to show that all deliverables due on **30 June 2004** will be submitted as a single package, to be reviewed and approved, the environmental community concerns stated in the petition filed after the December Regional Board meeting will be partly satisfied (they also request that Regional Board review and approval be required annually).
- Given the number of Regional Board programs and volume of matters coming before the Board, requiring Regional Board review and approval of every report submitted from every watershed group, would constitute an infeasible process that could not be supported by current staff resources, or time on the part of Regional Board members. No other Regional Board regulatory program has this requirement (i.e., Regional Board approval of all Discharger submitted reports).
- The Regional Board’s case files for the Conditional Waiver and for Watershed Groups filings for coverage under the Conditional Waiver are public records and are available for the public review.

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- Due to the limited resources provided to address the requirements of this program regular status reports may be difficult to present to the Regional Board every six months.

Discussion:

Submittal of various technical reports is a condition of the Conditional Waiver. The Regional Board or the Executive Officer must be able approve or disapprove a technical report based on the recommendations of Regional Board staff to ensure that the conditions of the Conditional Waiver are being met during the term of the Conditional Waiver.

Where a delegation has been made by the Regional Board, the Executive Officer routinely approves workplans, surface and ground water monitoring programs, ground water monitoring well workplans, closure plans, and monitoring reports as specified in WDRs, Section 13267 Technical Report Requests, Cleanup and Abatement Order, Time Schedule Order, and Cease and Desist Orders as delegated by the Regional Board. Requiring the Regional Board to review all such documents would be infeasible in light of the limitations of Regional Board member time and the volume of matters from the many regulatory programs coming before the Regional Board each meeting.

It is important that the public has full and fair opportunity to review, comment on and track the progress of the work conducted to satisfy the conditions of this Conditional Waiver. This could be accomplished by providing public notice of report availability and the opportunity to submit written comments and concerns for consideration by the Regional Board. Regional Board staff could public notice when the Executive Officer has determined that a watershed group report complies with the requirements of the Conditional Waiver. Interested parties who wish to review and comment on this report may do so. If these parties do not agree with the determination of the Executive Officer, they may submit their concerns to the Regional Board. If significant issues are raised, Staff would present these concerns directly to the Regional for review and action.

Staff proposes to provide annual Irrigated Lands Conditional Waiver program status reports to the Board as an information item. This report would include progress of watershed group formation, submission and Executive Officer approval of Watershed Group reports, activities related to Dischargers opting for individual waivers or Waste Discharge Requirements, and identification of areas needing additional effort to achieve compliance with water quality objectives and protection of beneficial uses. Comments from interested persons can be summarized at this time, and interested persons can have the opportunity to address the Regional Board. It is anticipated that if any matter arises that requires further Regional Board consideration and action, the Regional Board can provide direction to staff and the matter can be brought back before the Regional Board for action.

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The public notice process outlined above is not used by most of the other Regional Board program at this time. The Stormwater program does implement a modified public notice and Regional Board approval process. However, various Regional Board and Executive Officer actions are being posted on the Regional Board's Web Page. The State Board also posts some violations and enforcement actions via the Non-Compliance Database.

Alternatives:

Option No. 1 Do not revise the existing language in the Conditional Waiver.

Option No. 2 For Watershed Groups only - Revise the language in the Conditional Waiver to provide for public notice of: 1. report availability (thus providing for public review and comment on program deliverables), 2. public notice of Executive Officer determination that the report(s) comply with the requirements of the Conditional Waiver, and 3. that staff will present program status reports annually as an information item to the Regional Board; revise the language in the Conditional Waiver to clarify that the Executive Officer will approve deliverables..

Option No. 3 Revise the Conditional Waiver to include Monitoring and Reporting Program requirements similar to those approved by the Regional Board and the Executive Office for Dischargers regulated by other programs. The Watershed Group should submit the Detailed Report on **1 March 2004**. This report would be reviewed by Regional Board staff for compliance with the Monitoring and Reporting Program minimum requirements and the Executive Officer would determine in writing that it meets these requirements. If the report does not meet the minimum requirements, the report would be returned to the group for modification. The Executive Officer could also execute a Watershed Group specific Monitoring and Reporting Program Plan. This Watershed Group specific plan would be based on information submitted by the Watershed Group and developed by Regional Board staff for the Executive Officer's review, approval and execution. The Watershed specific Monitoring and Reporting Program Plan would be based on the program requirements outlined in the conditional Waiver and approved by the Regional Board and the Detailed Report submitted by the Watershed Group. The Executive Officer's action to require the Monitoring and Reporting Program would be subject to Regional Board and State Board review and approval, pursuant to the State Board's administrative procedures and the Water Code.

Staff Recommendation:

A combination of Option No. 2 and 3.

Interested persons may review the reports required by the Conditional Waiver and submit written comments and concerns for consideration by the Regional Board.

Staff propose to present information reports on the Irrigated Lands Waiver program to the Regional Board at least annually, summarizing watershed group formations, submission and Executive Officer determinations regarding watershed group reports and deliverables, and activities related to Dischargers opting for individual Conditional

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Waivers or Waste Discharge Requirements. Annual reports will also identify areas needing additional effort to achieve compliance with receiving water objectives and protection of beneficial uses.

To implement Option No 3 - Regional Board staff proposes a Monitoring and Reporting Program to specifically identify reporting requirements. Meeting the terms and conditions of the Monitoring Reporting Program is a condition of the Conditional Waiver. This option would also allow the Executive Officer to require Watershed specific Monitoring and Reporting Programs as a condition of the Conditional Waiver to address watershed specific issues as necessary.

7. Should the Conditional Waiver for Watershed Groups require water quality management plans from every individual?

Existing Conditional Waiver:

Site-specific management plans are not required from individuals operating under the watershed program Conditional Waiver.

Agricultural Position:

No comment.

Environmental Position:

Each Discharger should adopt site-specific management plans. Watershed plans must include water quality management plans for each individual participant. Conditions must mandate that every participant must implement BMPs pertinent to their operations and identified in their site-specific management plan.

Considerations:

- Site-specific management plans will document the practices being used on each farm, allow better tracking of progress in achieving water quality objectives, and focus on source control and pollution prevention.
- The resources allocated to the Regional Board for this program are not sufficient to review site-specific management plans from every Discharger.
- If all Watershed Group participant-dischargers prepare individual management plans, presumably these plans will need to be reviewed. Thousands of dischargers are expected to apply for coverage under this waiver as participants of a Watershed Group. At this time, it is not realistic to assume that the Regional Board or staff will be able to review these site-specific plans in a timely manner and at this point there is no other review mechanism included in the waiver.

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- Watershed groups have no enforcement authority unless they voluntarily choose to adopt a structure that includes this component.

Discussion:

Resolution R5-2002-0201, which adopted the Conditional Waiver, recognizes that:

- an effective watershed program with active involvement of the water community and the agricultural community has the potential for identifying and correcting water quality problems without the need for individual or general waste discharge requirements, thus saving both the dischargers and the state the administrative burden involved with a permit-based program; and
- formation and operation of watershed efforts are the responsibility of local entities or individuals

Requiring individual management plans from all dischargers would defeat, in part, the purpose of the watershed program approach. Requiring such plans as a condition of the waiver would make the watershed program approach more akin to individual waivers or WDRs. Great benefits can result from developing and implementing site-specific plans, but Watershed Groups will have to determine the appropriate approach for their area and participants. Should a watershed program effort be unsuccessful, a consequence is that higher regulatory oversight on a site-specific basis could be warranted.

Alternatives:

Option No. 1 Do not revise the Conditional Waiver.

Option No. 2 Revise the Conditional Waiver to require that watershed plans include water quality management plans for every individual participant operating under a watershed program.

Staff Recommendation:

Option No. 1 - Do not revise the Conditional Waiver.

8. Should the Conditional Waiver specify that the watershed monitoring programs include waste constituents of concern to drinking water providers?

Existing Waiver:

“Regardless of which category a discharger falls under, the following requirements must be met:

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- (1) Discharges shall not cause or contribute to conditions of pollution or nuisance as defined in Section 13050 of the California Water Code; and
- (2) Discharges shall not cause or contribute to exceedances of any Regional, State, or Federal numeric or narrative water quality standard.”

Agricultural Position:

Does not specifically comment on drinking water constituents but suggests that water quality investigations focus on impacts to beneficial uses.

Environmental & Drinking Water Provider Position:

Watershed monitoring plans must include monitoring for pollutants of concern to drinking water providers, including, but not limited to, total dissolved solids, total organic carbon, pathogens and salts.

Considerations:

- One of the beneficial uses the Regional Board is charged with protecting is drinking water. Including this component in the Conditional Waiver language would emphasize this.
- Itemizing constituents that must be monitored in all watersheds is not necessary. The fundamental requirements for discharges to not cause or contribute to conditions of pollution or nuisance or cause or contribute to exceedances of any Regional, State, or Federal numeric or narrative water quality standard should be sufficient.
- Individual and/or Watershed monitoring plans could be required to contain some constituents that would be required to protect all beneficial uses. Basic parameters are commonly required in Monitoring and Reporting Programs in other regulatory programs.

Discussion:

The Basin Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin include in their list of existing and potential beneficial uses:

Municipal and Domestic Supply (MUN) - Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.

Both Basin Plans have designated MUN for specific water bodies. Additionally, the Sacramento River and San Joaquin River Basin Plan, in addition to specific application of MUN to identified water bodies, provides:

Water Bodies within the basins that do not have beneficial uses designated in Table II-1 are assigned MUN designations in accordance with the provisions of State Water Board Resolution

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No. 88-63 which is, by reference, a part of this Basin Plan. These MUN designations in no way affect the presence or absence of other beneficial use designations in these water bodies.

Further, both Basin Plans provide:

Unless otherwise designated by the Regional Water Board, all ground waters in the Region are considered as suitable or potentially suitable, at a minimum, for municipal and domestic water supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PRO).

Water quality objectives are defined as "...the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area" (Water Code section 13050(h)). The Conditional Waiver provides that:

- (1) Discharges shall not cause or contribute to conditions of pollution or nuisance as defined in Section 13050 of the California Water Code; and
- (2) Discharges shall not cause or contribute to exceedances of any Regional, State, or Federal numeric or narrative water quality standard."

This applies to all beneficial uses, including MUN. Specific itemization of narrative and numeric objectives that must be met, and parameters that must be monitored, in the Conditional Waiver is not necessary. All beneficial uses must be protected. Information as to which beneficial uses and objectives apply to water bodies within their respective watersheds is available to groups and individuals in the Basin Plans.

Staff is proposing a Monitoring and Reporting Program, which includes minimum monitoring requirements for various constituents, related to protecting MUN beneficial uses. The Detailed Reports submitted by the Watershed Groups can identify the applicable beneficial uses for the water bodies within their watersheds, and of those downstream, along with objectives to support those beneficial uses, and plan their monitoring to document whether beneficial uses are being protected. This would mean that where MUN applies, or where water bodies are tributary to water bodies with MUN designated, monitoring plans would need to include monitoring for waste constituents of concern for drinking water.

Analysis costs for total dissolved solids, total suspended solids, total and dissolved organic carbon, and salts are relatively inexpensive (example costs: TDS and TSS - around \$17 each; TOC - around \$38; DOC - around \$45; electrical conductivity [salt] - less than \$5, or a good quality meter can be purchased for about \$600 to \$700 for testing directly in the field). For pathogens, E. coli analysis costs about \$35; analyses for giardia and cryptosporidium are more costly, being around \$435 each. For nutrients, example costs are about \$19 each for total ammonia, nitrate, nitrite and total Kjeldahl nitrogen, and around \$25 each for ortho-phosphate and phosphate.

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Alternatives:

Option No. 1 Do not revise the Conditional Waiver.

Option No. 2 Require that the proposed Conditional Waiver implement a Monitoring and Reporting Program that requires the Detailed Report to specify that watershed monitoring plans must include monitoring for constituents of concern to drinking water providers, including, but not limited to, total dissolved solids, total organic carbon, pathogens and salts. Detailed Report shall also identify the applicable beneficial uses for the water bodies within their watersheds, and of those downstream, along with objectives to support those beneficial uses, and plan their monitoring to document whether beneficial uses are being protected.

Staff Recommendation:

Option No. 2 - The proposed Monitoring and Reporting Program is provided for Regional Board consideration.

9. Should the Conditional Waiver require that the watershed plan be updated annually?

Existing Waiver:

Does not specify annual updates of the watershed plan. However, the annual reports must cover how water quality problems will be addressed in the coming year. See the following text for reference.

“Annual Reports

In addition to the reports identified above, the watershed group shall submit annual reports covering the calendar year detailing accomplishments and plans relative to all aspects of the watershed effort, including, but not limited to the following:

- All water quality monitoring results, an interpretation of the data and proposed responses. Data must be tabulated and graphed and maps shall be provided to illustrate where samples were collected.
- Results of management practice evaluations conducted during the reporting period.
- Status of management practice implementation.

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- Planned activities for the coming year, including, but not limited to details of monitoring programs, management practice evaluations and revisions to compliance timetables.”

Agricultural Position:

No comments regarding updates to the watershed plan.

Environmental Position:

Each watershed (monitoring) plan must be updated annually, including a report of the prior year’s results and the following year’s proposed implementation plan and estimated pollution reductions.

Considerations:

- As monitoring reveals areas of concern, monitoring plans will need to be revised, and as management practices are evaluated, implementation plans (and practices themselves) may need to be refined.
- The existing language is appropriate for a two-year waiver. Changes to the requirements for watershed plans may be necessary at a later date but it may be premature to include a requirement for annual updates at this time.

Discussion:

Frequency of required watershed plan updates based upon newly developed data and information is an important consideration, one that would be appropriate to address in the ten-year program being developed. The level of reporting specified in the proposed Conditional Waiver and the proposed Monitoring and Reporting Program is appropriate for the proposed three-year waiver.

Alternatives:

- Option No. 1 Do not require the annual updates of watershed plans for the duration of the Conditional Waiver.
- Option No. 2 Revise the Conditional Waiver to require annual updates to the watershed plans.

Staff Recommendation:

Option No.1 - Annual watershed plan updates are not necessary for Conditional Waiver.

10. Should managed wetlands be considered irrigated agriculture?

Existing Conditional Waiver:

“...Irrigated lands are lands where water is applied for producing crops and, for the purpose of this Conditional Waiver, includes, but is not limited to, land planted to row, field and tree crops as well as commercial nurseries, nursery stock production and managed wetlands; and”

Agricultural Position:

No position stated.

Environmental Position :

Managed wetlands are farms (DeltaKeeper statement at December 02 hearing).

Department of Fish and Game (DFG) Position:

“The document fails to define what constitutes ‘managed wetlands’ and why they are being included in the discharge management plans. Does this include state managed ecological reserves and state and federally managed wildlife areas? If so, what is the rationale for including government land that supports the state’s natural resources with high intensity, commercial agriculture that use pesticides and fertilizer?”

US Fish and Wildlife Service (USFWS) Position:

“We feel it is inappropriate to treat managed wetlands in the same manner as irrigated agriculture in this waiver because they do not fall under the rubrics of crop production and irrigated agriculture. They are substantially different from agriculture in purpose, management practices, and most importantly in their effects on the aquatic contamination problems in the Central Valley.”

“The rice farming community is also in an unusual situation in that their rice growing discharges are already covered under a Regional Board program to reduce discharges of pesticides during the growing season. However, many rice growers partner with Federal, State, and local programs to reflood their land in the winter to break down straw and provide wetland habitat for wintering waterfowl. Many other non-rice growing farmers throughout the Central Valley do similar seasonal wetland habitat management activities. These activities should more appropriately be addressed as ‘managed wetlands.’”

“Wetland management practices are not comparable to irrigated agriculture- it does not involve planting or harvesting crops, nor application of fertilizers or pesticides. Consequently, if managed wetlands need a waiver of WDRs, such a waiver should be crafted to take into consideration the particular practices, purposes, and legal constraints of management of wetlands and should be treated separately from irrigated agriculture.”

USFWS recommends either the development of a separate waiver for managed wetlands or creation of a third category and set of conditions in the waiver that recognize and

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address the unique conditions of managed wetlands. It also is open to developing a Memorandum of Understanding or Management Agency Agreement with the Regional Board to address best management practices and other management measures that are appropriate for refuges and managed wetland partners in the Central Valley.

Grasslands Water District Position:

Concurs with USFWS on the recommendation to develop a separate waiver or separate category and conditions in the waiver for managed wetlands.

Ducks Unlimited Position:

“While we have many questions as to why managed wetlands were included within the definition of ‘irrigated lands’, our experience suggests that locally based watershed or sub-watershed programs, as proposed in the waiver, have the best opportunity to improve water quality in a sustainable fashion that meets the full spectrum of public trust benefits and public interests in the affected area.”

Considerations:

- Managed wetland are designed to enhance wildlife habitat, primarily waterfowl.
- Managed wetlands are the result of actions of various parties, public and private, to mitigate or enhance the existing wetland habitat.
- Some discharges from managed wetlands may be subject to the NPDES program.
- An advantage to including managed wetlands in the irrigated lands Conditional Waiver is that with current staff resources, a level of regulatory oversight is provided and the development of information needed for preventing and addressing water quality impacts from this category of discharges can begin. Additional resources may be needed to allow staff to develop a separate program or separate conditions in a managed wetland specific Conditional Waiver, waiver, and prepare the necessary environmental documents, to address this category of discharges.

Discussion:

Managed wetlands share a number of features with other irrigated agricultural lands. Water is purposely applied, a “crop” of wildlife habitat and forage is produced and the process generates drainage carrying salts, nutrients and other constituents. Pesticides are used in some managed wetlands to control weeds and insects. Managed wetlands are frequently surrounded by irrigated agriculture and share the same water supplies and drainage systems. As with other irrigated agricultural lands, water quality issues can best be addressed through changes in management practices rather than through treatment of the discharges.

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Salinity is a major problem in many parts of the Central Valley. Managed wetlands contribute to this problem as a result of naturally occurring processes. Managed wetlands irrigate with water from various sources but all sources will have some degree of salinity to begin with. In portions of the San Joaquin River and Tulare Lake Basins in particular, source water salinity can be quite high. As the water remains on the managed wetland area, evaporation takes place and the salts concentrate. The resulting discharge can contain enough salts to adversely impact receiving waters.

Managed wetlands are primarily operated to support populations of wildlife. The effect of having a large number of animals concentrating in these areas is that animal waste is deposited. Nutrient components of these wastes - nitrates, phosphates, and other constituents as well as elevated organic carbon and bacteria levels – may be present in the discharges and unless appropriately managed, may contribute to degradation of receiving waters.

Given these factors, regulation of discharges from managed wetlands is warranted. However, given the differences in function and management practices between managed wetlands and irrigated agriculture, and legal requirements specific to wetlands, a separate Conditional Waiver or general WDRs for discharges from both public and private managed wetlands is appropriate. A limiting factor is the lack of resources needed to develop this alternative at this time. One potential approach could be for USFWS and/or DFG to develop, with Regional Board staff, a proposed Conditional Waiver and necessary environmental documents to support it. Managed wetlands could remain for the time being under the existing waiver, which would provide coverage while allowing time for the managed wetland specific Conditional Waiver to be developed and to conduct the necessary environmental analysis.

Alternatives:

Option No. 1 Do not revise the Conditional Waiver.

Option No. 2 Do not remove managed wetlands from the Conditional Waiver at this time, but direct staff to work with USFWS and/or DFG and the private managed wetlands, should those parties wish to work on developing a specific Conditional Waiver and the necessary environmental documents.

Option No. 3 Exclude managed wetlands from the definition of irrigated lands. Direct staff to request ROWD(s) from the federal, state, local and private managed wetland facilities that discharge wastes from irrigated lands to surface waters.

Staff Recommendation:

Option No. 2 – Direct staff to work with USFWS and/or DFG and other effected parties to explore whether those parties wish to develop a proposed managed wetlands specific Conditional Waiver, and necessary environmental documents. Do not exclude managed

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wetland from the Conditional Waiver until the Regional Board takes action to address the regulation of discharges from managed wetlands.

11. Should discharges from rice acreage not specifically addressed by the Rice Pesticide Program cover by the Conditional Waiver?

Existing Conditional Waiver:

“...Irrigated lands are lands where water is applied for producing crops and, for the purpose of this Conditional Waiver, includes, but is not limited to, land planted to row, field and tree crops as well as commercial nurseries, nursery stock production and managed wetlands; and”

Agricultural Position:

California Rice Industry Association - the Rice Pesticide Program should be the sole water quality control effort in which rice growers must be involved.

Environmental Position:

No position stated.

Considerations:

- Not all pesticides used in rice production, or other constituents of concern that can be present in discharges from rice fields, are addressed by the Rice Pesticide Program.
- Regional Board trigger levels for thiobencarb, one of the herbicides addressed in the Rice Pesticide Program, were exceeded four times during the 2002 rice season, with a peak detection of 1.6 ug/l occurring on 24 May at the City of West Sacramento's drinking water intake. This level exceeded the thiobencarb water quality objective and secondary MCL.

Discussion:

The California Rice Industry Association has requested that the Regional Board recognize the Rice Pesticide Program as the sole water quality control effort for rice growers. This would exempt rice growers from requirements of the Conditional Waiver process and allow rice growers to discharge without addressing water quality issues that are not involved in the pesticide control effort.

The Rice Pesticide Program primarily addresses five pesticides referenced in the implementation section of the Basin Plan. Information on other pesticides used on rice fields has been included in the annual program reports from the Department of Pesticide Regulation to the Regional Board, but the Regional Board has limited its formal actions to the materials addressed in the Basin Plan.

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While the Rice Pesticide Program has tracked the discharge of pesticides, it has not monitored the impacts of other constituents. As with other crops, discharges from rice fields may contain nutrients, salts, organic constituents, sediment and other materials that can impact receiving waters. Since discharges from rice fields dominate many of the water bodies in the Sacramento River basin, the impact of these discharges deserve attention.

The Conditional Waiver allows for the development of a commodity-based “Watershed Group” and staff has suggested the concept of expanding the Rice Pesticide Program into a rice water quality program that could address the requirements of the Conditional Waiver while involving the same groups that have been working on pesticide issues. This approach would address all water quality issues with a minimum disruption to ongoing efforts.

Staff Recommendation:

Staff does not recommend any changes to the Conditional Waiver with respect to Dischargers growing rice or discharging irrigation water or stormwater from rice fields.

12. Should the Conditional Waiver be revised to provide additional detail on the criteria that must be met by the monitoring program, including whether bioassessment can be included in monitoring plans and whether load reductions must be estimated and monitored?

Existing Waiver:

“Monitoring Program

“Watershed groups will review results of ongoing monitoring conducted by the Regional Board and other agencies. This information, along with historical information, will be used in developing a watershed-monitoring plan that will be submitted to the Regional Board for review and approval.

“The watershed group shall develop a monitoring plan to assess the sources and impacts of waste in discharges from irrigated lands in the subwatersheds and to track progress toward lowering discharges and meeting TMDL goals. This plan must include a quality assurance/quality control component. All data developed by watershed groups shall be submitted to the Regional Board.”

“Management Practices

“A key responsibility of the watershed groups is the development and promotion of management practices that reduce discharges of waste to acceptable levels. The watershed group will be responsible for monitoring the success of identified management practices through the program’s water quality monitoring program as well as through the evaluation of the management practices. The watershed

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program should identify a process to adapt the management practices utilized as necessary based upon the monitoring information.”

Loads not addressed.

Agricultural Position:

The monitoring program should be an extension of the Regional Board’s existing monitoring program. If toxicity is found, a weight of evidence approach should be used to determine whether the water body in question has failed to meet water quality goals and objectives. Bioassessment should be an option.

No comments regarding load estimates or load reductions.

Environmental Position:

Implementation plans must include watershed-wide estimates of load reductions of individual pollutants to be achieved. Monitoring plans should track success in achieving load reductions on an annual basis. The Regional Board should provide monitoring protocols.

Considerations:

- Including criteria that must be met by the monitoring program would assure that watershed group products were judged by the same criteria. Groups would be less likely to provide inadequate plans and reports if they know in advance what is expected of them.
- Including criteria that must be met by the monitoring program removes some of the flexibility to adjust requirements based on the group’s area of coverage or water quality issues specific to that area.
- The agricultural community has indicated their interest in using bioassessment as a major component of their monitoring programs. Biocriteria have not been developed for the Central Valley Region of California. A number of Regional Boards are beginning to develop information for establishing such criteria, but it will take years to develop the information necessary. Addressing water quality problems revealed through other lines of evidence (i.e., toxicity or concentrations of specific pollutants) should not be delayed.
- A weight of evidence approach provides more information than using a single line of evidence, but requires more resources and technical expertise to implement.
- Watershed Groups will be capable of making loading estimates. Flow information is routinely tracked within most water districts. Data from these

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stations should be readily available to watershed groups for making load calculations. Also, source water usage and climate data can also be used to estimate or calculate discharge rates and volumes.

- New flow monitoring stations may need to be installed in some locations, placing an additional economic burden on the Watershed Group or individual Dischargers for equipment and data collection.
- Determining loads will be necessary to assess progress on the 10-year plan for compliance, as well as compliance with TMDLs.

Discussion:

Bioassessment data may be considered in a weight of the evidence approach as the State moves towards development of biocriteria, however, there is currently no benchmark to determine if biological communities in the Central Valley are impaired. Some Regional Boards are developing indices of biological integrity (IBIs). The Central Valley Regional Board staff are currently working with the Department of Fish and Game on reference sites and characterizing variability in these aquatic systems. A better understanding of the spatial and temporal variability throughout low gradient water bodies in the Central Valley is needed to establish benchmarks.

Beneficial use impairments are currently identified through violations of narrative water quality objectives (e.g., toxicity) or exceedances of numeric water quality objectives. The current body of knowledge for bioassessment in the Central Valley is such that it cannot be used for regulatory decision-making at this time. A weight of the evidence approach is encouraged though, as each water quality method (toxicity, chemistry, bioassessment) provides answers to different questions about beneficial use impairments. Each method also has limitations that must be considered. However, any impairment documented using a Regional Board recognized method, based upon best available science, constitutes a problem that must be addressed (i.e., a weight of the evidence approach does not mean you must use all three methods to be able to document an impairment – toxicity alone, or chemical analyses showing concentrations above numeric objectives are enough to document that a problem must be addressed).

This is consistent with US EPA guidance and Basin Plan policy. Section 101(a) of the Clean Water Act provides, “[t]he objective of the Act is to restore and maintain the chemical, physical and biological integrity of the nations waters.” US EPA guidance provides that regulatory agencies should strive to fully integrate all three approaches since each has its respective capabilities and limitations. (Technical Support Document for Water Quality-based Toxics Control, US EPA, March 1991.) Further in this guidance, the US EPA indicates that, in evaluating results from the different approaches, each approach’s results can be evaluated independently and the one that provides the most protection should be used. The Basin Plan and California Toxics Rules include numerical water quality objectives for many constituents. Compliance with narrative

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toxicity objectives are determined by analyses of indicator organisms, species density, population density, growth anomalies, and biotoxicity tests of appropriate duration. In addition, criteria and guidelines from other agencies are considered in evaluating compliance with the narrative objective.

Load reduction estimates and monitoring to verify reductions would provide important information. Particularly, for CWA 303(d) listed water bodies loading estimates and monitoring for listed constituents should be conducted.

Staff has proposed minimum monitoring requirements. The proposed requirements, monitoring for all constituents on the 303 (d) list for any downstream waterbody is required, along with sufficient sampling sites, flow monitoring and frequency of sample collection to allow calculation of load discharged for every constituent monitored. Bioassessment, while not required, is encouraged.

The proposed Conditional Waiver includes a Monitoring and Reporting Program requirements similar to those approved by the Regional Board and the Executive Officer for Dischargers regulated by other programs. When the Watershed Group submits the Detailed Report on **1 March 2004**, a Watershed Group specific Monitoring and Reporting Program could be proposed by Regional Board staff to the Executive Officer for approval. The Watershed specific Monitoring and Reporting Program would be based on the minimum requirements outlined in the Conditional Waiver and approved by the Regional Board and the Detailed Report submitted by the Watershed Group. The Executive Officer's action to require the Monitoring and Reporting Program would be subject to Regional Board and State Board review and approval, pursuant to the State Board's administrative procedures and the Water Code.

Alternatives:

Option No. 1 Do not revise the Conditional Waiver.

Option No. 2 Adopt a Monitoring and Reporting Program as a condition to the Conditional Waiver. Monitoring and Reporting Program requirements should be similar to those approved by the Regional Board and the Executive Officer for Dischargers regulated by other programs.

Staff Recommendation:

Option No 2 - Regional Board staff has proposed Monitoring and Reporting Program as a condition to the Conditional Waiver. The Monitoring and Reporting Program and allows the Executive Officer to require Watershed specific Monitoring and Reporting Programs as a condition of the Conditional Waiver.

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VII. RECOMMENDATION

Staff recommend that the Regional Board adopt:

1. the revised Resolution approving the Initial Study and Negative Declaration;
2. the proposed Conditional Waiver Order;
3. the proposed Watershed Group Monitoring and Reporting Program; and
4. the proposed Individual Discharger Monitoring and Reporting Program.

In addition, staff propose to post the Management Practice matrix document on the Regional Board's web site, participate in the new fee regulation task force sponsored by State Board, update the Regional Board and the Public at least annually on the status of the program and provide the current status of the participation of the Watershed Groups in the Conditional Waiver for Irrigated Lands program to the public on a regular basis via the Regional Board Web site.

VIII. ATTACHMENTS

- A. Notice of Preparation, 19 March 2003
- B. EIR –10 Year Plan Schedule
- C. Management Practice Matrix
- D. Commodity Outreach Contact List
- E. Entities Information Matrix
- F. Watershed Group Criteria
- G. Fee Schedule

04/10/03

ATTACHMENT A

NOTICE OF PREPARATION, dated 19 February 2003

**NOTICE OF COMPLETION AND ENVIRONMENTAL DOCUMENT
TRANSMITTAL, dated 19 February 2003**

NOTICE OF PREPARATION

To: State Clearing House
P.O. Box 3044
Sacramento, CA 95812-3044

From: California Regional Water Quality Control Board,
Central Valley Region
1685 "E" Street
Fresno, CA 93706-2020

Subject: Notice of Preparation of a Draft Environmental Impact Report

The California Regional Water Quality Control Board, Central Valley Region, will be the Lead Agency and will prepare an environmental impact report for the Project identified below. The Regional Board requests the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials.

Due the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.


Please send your response to **Pete Osmolovsky** at the address shown above.

We will need the name of a contact person in your agency.

Project Title: Environmental Impact Report for the Regulation of Discharges to Waters of the State from Irrigated Lands Within the Central Valley Region

Project Applicant: California Regional Water Quality Control Board, Central Valley Region

Date: 19 February 2003

Signature: 

Title: Senior Water Resources Control Engineer

Telephone: 916 255-3000

Notice of Preparation – Scoping Meetings

TO: Trustee Agencies, Responsible Agencies, Reviewing Agencies and Interested Persons

FROM: California Regional Water Quality Control Board, Central Valley Region

SUBJECT: Notice of Preparation and Scoping Meetings of an Environmental Impact Report for the Regulation of Discharges to Waters of the State from Irrigated Lands Within the Central Valley Region

Lead Agency

Agency Name	California Regional Water Quality Control Board, Central Valley Region
Street Address	1685 "E" Street
City/State/Zip	Fresno, CA 93706-2020
Contact	Pete Osmolovsky

The Regional Water Quality Control Board, Central Valley Region (Regional Board), acting as the Lead Agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.), is initiating the preparation of an Environmental Impact Report (EIR) for the project identified below. The Regional Board requests the views of your agency as to the scope and content of the environmental information, which is germane to your agency's responsibilities in connection with the proposed project. We will also accept comments from interested persons.

Since the Lead Agency has determined that an EIR is the appropriate level of environmental review for the proposed project, the preparation of an Initial Study is not necessary. All environmental topics included in the CEQA Checklist will be addressed in the EIR. Thus, the environmental review process can begin without the preparation of an Initial Study.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice, and in no case later than 31 March 2003 (the end of the public comment period).

Please send your response to Pete Osmolovsky at the address shown above. Please provide the name of a contact person in your agency.

Purpose and Need for the Environmental Review: The purpose of the environmental review is to analyze the potential significant adverse environmental impacts, including a cumulative effects analysis, of the project, which is the Regional Board's regulation of discharges of waste from irrigated lands to waters of the State in accordance with the Regional Board's regulatory authority under the Porter-Cologne Water Quality Control Act (California Water Code Division 7). The EIR should describe the environmental setting, i.e., the baseline conditions for existing irrigated agricultural discharges to waters of the State, evaluate the potential significant adverse environmental impacts that could result from the regulation of discharges of waste to waters of the State, including an evaluation of cumulative effects, identify alternatives for addressing adverse impacts, and describe mitigation measures that would reduce those impacts. The current Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Resolution No. R5-2002-0201), adopted 5 December 2002, expires 31 December 2004. In adopting Resolution No. R5-2002-0201, the Regional Board committed to preparing a 10-year implementation program to regulate discharges of waste from irrigated lands to assure compliance with water quality standards, and to undertake an EIR process during the next two years to analyze the potential significant adverse environmental impacts of that project.

Location: The project applies to all of the irrigated land and managed wetlands in the Sacramento River, San Joaquin River and Tulare Lake Basins. The project does not apply to discharges from irrigated lands to the extent they are regulated through other means by the Regional Board. Specifically, the project does not apply to the Grasslands Bypass Project and selected evaporation ponds and commercial nurseries, which are regulated through waste discharge requirements, pursuant to the California Water Code.

Project Description: The Regional Board, acting as the Lead Agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.), is initiating the preparation of an EIR to analyze the potential

significant adverse environmental impacts of the regulation of discharges of waste to waters of the State from irrigated lands, including commercial nurseries and managed wetlands, to assure water quality standards are met. "Discharges from irrigated lands" include surface discharges (tailwater), operational spills, subsurface drainage limited to that generated by installing drainage systems to lower the water table below irrigated lands, and storm water runoff flowing from irrigated lands. These discharges do not include those discharges subject to the National Pollutant Discharge Elimination System regulated under the federal Clean Water Act. The Regional Board currently regulates the discharge of waste from irrigated lands according to the "Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands" adopted 5 December 2002. The project does not include the regulation of agriculture in general, only the regulation of discharges of waste to waters of the State.

In accordance with the California Water Code, Division 7 the Regional Board has the authority and responsibility to regulate discharges of waste that may affect the quality of the waters of the State. Options include, but are not limited to: (1) issuing Waste Discharge Requirements (WDRs) (individual or general based on a category); (2) issuing a waiver of WDRs (individual or by type); (3) specifying prohibitions of discharge (with conditions or by area); (4) adopting implementation programs in the Water Quality Control Plans (Basin Plans); (5) entering into agreements to encourage actions for water quality control, such as Memoranda of Understanding/Management Agency Agreements; and (6) encouraging or requiring water quality control through development of watershed management plans.

The Regional Board intends to fund and direct the preparation of a draft and final EIR by an independent contractor.

Areas of Potential Environmental Impact: Although all environmental impacts of the project will be evaluated in the EIR, it is anticipated that areas of potential significant adverse impacts may include: hydrology and water quality, biological resources, agricultural resources, and land use/planning.

Scoping Meetings: Scoping meetings will be held in March 2003 in the following locations:

5 March 2003

Time: 9:00 a.m.

Central Valley Regional Water Quality Control Board, San Joaquin Conference Room

1685 "E" Street

Fresno, CA 93706

(559) 445-5116

Directions: Available on our web site at http://www.swrcb.ca.gov/rwqcb5/contact_us/index.html

6 March 2003

Time: 9:00 a.m.

Central Valley Regional Water Quality Control Board, Main Conference Room

3443 Routier Road

Sacramento, CA 95827

(916) 255-3000

Directions: Available on our web site at http://www.swrcb.ca.gov/rwqcb5/contact_us/index.html

In order to hold the scoping meetings in a timely manner, and assure time for adequate consideration of all comments, Regional Board staff may enforce maximum time limitations on verbal comments received from stakeholders present at the meeting.

The facility is accessible to people with disabilities. Individuals requiring special accommodations are requested to contact Ms. Janice Tanaka at (916) 255-3039 at least 5 working days prior to the meeting. TTY users may contact the California Relay Service at 1-800-735-2929 or voice line at 1-800-735-2922.

Written Comments: Within 30 days after receiving the Notice of Preparation, but not later than 31 March 2003 (the end of the public comment period), each Responsible Agency shall provide the Lead Agency with specific detail about the scope, significant environmental issues, reasonable alternatives, and mitigation measures related to the Responsible Agency's area of statutory responsibility that will need to be explored in the Draft EIR. In accordance with CEQA Guidelines Section 15082(b)(1)(B), responsible and trustee agencies should indicate their respective level of responsibility for the project in their response.

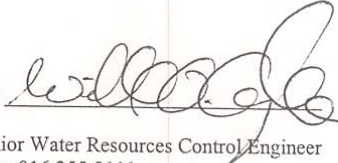
Comments from individual respondents, including names and home addresses of respondents, will be made available for public review. Individual respondents may request that their home address be withheld from public disclosure, which we will honor to the extent allowable by law. If you wish to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public disclosure in their entirety.

Written comments on the scope of the EIR should be sent to:

Pete Osmolovsky
California Regional Water Quality Control Board,
Central Valley Region
1685 "E" Street
Fresno, CA 93706-2020
(559) 445-6086

Date: 19 February 2003

Signature:



Title: Senior Water Resources Control Engineer
Telephone: 916 255-3111

See Next Page for Map of Project Location

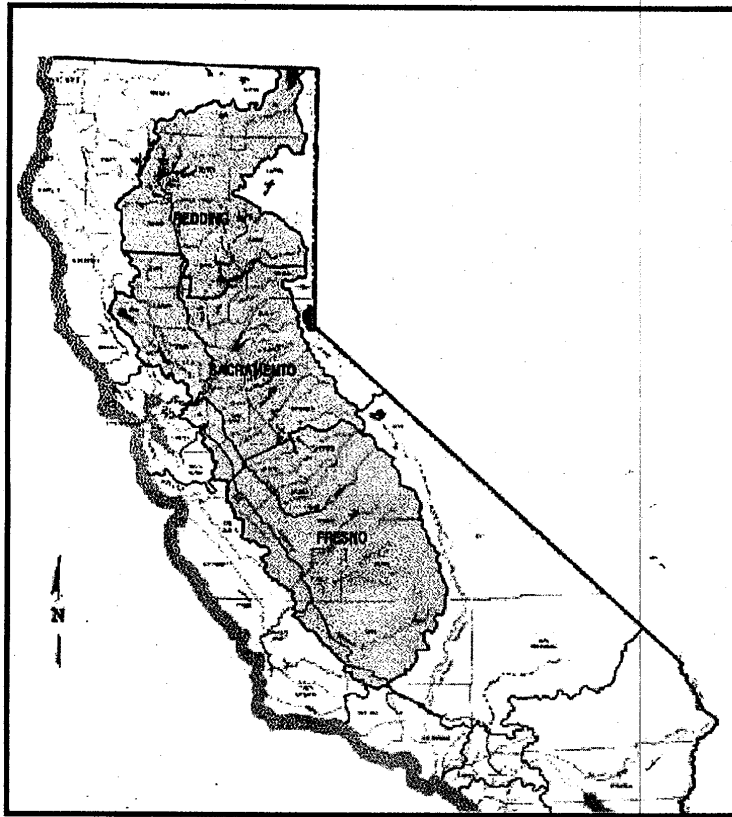


Figure 1 - Map of Project Location Boundaries, and Regional Board Office Jurisdictions

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, PO Box 3044, Sacramento, CA 95812-3044 916/445-0613

SCH # _____

Project Title: Regulation of Discharges to Waters of the State from Irrigated Lands Within the Central Valley Region

Lead Agency: Regional Water Quality Control Board, Central Valley Region

Contact Person: Pete Osmolovsky

Street Address: 1685 E Street

Phone: 559-445-6086

City: Fresno

Zip: 93706-2020

County: Fresno

Project Location:

County: see map attached to NOP

City/Nearest Community: _____

Cross Streets: _____

Zip Code: _____

Total Acres: _____

Assessor's Parcel No. _____

Section: _____

Twp. _____

Range: _____

Base: _____

Within 2 Miles: State Hwy #: _____

Waterways: _____

Airports: _____

Railways: _____

Schools: _____

Document Type:

CEQA:

☒ NOP☐ Early Cons☐ Neg Dec☐ Draft EIR☐ Supplement/Subsequent EIR

(Prior SCH No.) _____

☒ Other Notice of Scoping Meetings

NEPA:

☐ NOI☐ EA☐ Draft EIS☐ FONSI

Other:

☐ Joint Document☐ Final Document☐ Other _____**Local Action Type:**☐ General Plan Update☐ General Plan Amendment☐ General Plan Element☐ Community Plan☐ Specific Plan☐ Master Plan☐ Planned Unit Development☐ Site Plan☐ Rezone☐ Prezone☐ Use Permit☐ Land Division (Subdivision, etc.) ☒ Other Regulatory Program☐ Annexation☐ Redevelopment☐ Coastal Permit**Development Type:**☐ Residential: Units _____ Acres _____☐ Office: Sq.ft. _____ Acres _____ Employees _____☐ Commercial: Sq.ft. _____ Acres _____ Employees _____☐ Industrial: Sq.ft. _____ Acres _____ Employees _____☐ Educational _____☐ Recreational _____☐ Water Facilities: Type _____ MGD☐ Transportation: Type _____☐ Mining: Mineral _____☐ Power: Type _____ Watts _____☐ Waste Treatment: Type _____☐ Hazardous Waste: Type _____☐ Other: _____**Funding (approx.):**

Federal \$ _____

State \$ _____

Total \$ _____

Project Issues Discussed in Document:☐ Aesthetic/Visual☒ Agricultural Land☐ Air Quality☐ Archeological/Historical☐ Coastal Zone☒ Drainage/Absorption☐ Economic/Jobs☐ Fiscal☐ Flood Plain/Flooding☐ Forest Land/Fire Hazard☐ Geologic/Seismic☐ Minerals☐ Noise☐ Population/Housing Balance☐ Public Services/Facilities☐ Recreation/Parks☐ Schools/Universities☐ Septic Systems☐ Sewer Capacity☐ Soil Erosion/Compaction/Grading☐ Solid Waste☐ Toxic/Hazardous☐ Traffic/Circulation☐ Vegetation☒ Water Quality☒ Water Supply/Groundwater☒ Wetland/Riparian☒ Wildlife☐ Growth Inducing☒ Landuse☐ Cumulative Effects☐ Other _____**Present Land Use/Zoning/General Plan Designation:****Project Description:**

Program to regulate discharges to Waters of the State from irrigated lands within the Central Valley Region.

Revised 3-31-99

Reviewing Agencies Checklist

Form A, continued

KEY**S** = Document sent by lead agency**X** = Document sent by SCH

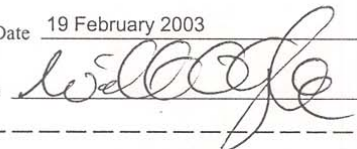
✓ = Suggested distribution

☒ **S** **Resources Agency**☒ **S** Boating & Waterways☒ **S** Coastal Commission☐ Coastal Conservancy☐ Colorado River Board☒ **S** Conservation☒ **S** Fish & Game☐ Forestry & Fire Protection☐ Office of Historic Preservation☒ **S** Parks & Recreation☒ **S** Reclamation Board☐ S.F. Bay Conservation & Development Commission☒ **S** Water Resources (DWR)**Business, Transportation & Housing**☐ Aeronautics☐ California Highway Patrol☐ CALTRANS District # _____☐ Department of Transportation Planning (headquarters)☐ Housing & Community Development☒ **S** Food & Agriculture**Health & Welfare**☒ **S** Health Services See Attached List _____**State & Consumer Services**☐ General Services☐ OLA (Schools)**Environmental Protection Agency**☐ Air Resources Board☐ California Waste Management Board☐ SWRCB: Clean Water Grants☐ SWRCB: Delta Unit☒ **S** SWRCB: Water Quality☐ SWRCB: Water Rights☐ Regional WQCB # _____ (_____)**Youth & Adult Corrections**☐ Corrections**Independent Commissions & Offices**☐ Energy Commission☐ Native American Heritage Commission☐ Public Utilities Commission☐ Santa Monica Mountains Conservancy☒ **S** State Lands Commission☐ Tahoe Regional Planning Agency☒ **S** Other See Attached List _____**Public Review Period** (to be filled in by lead agency)

Starting Date 19 February 2003

Ending Date 31 March 2003

Signature



Date

2/19/03

Lead Agency (Complete if applicable):

Consulting Firm: _____

Address: _____

City/State/Zip: _____

Contact: _____

Phone: (____) _____

Applicant: _____

Address: _____

City/State/Zip: _____

Phone: (____) _____

For SCH Use Only:

Date Received at SCH _____

Date Review Starts _____

Date to Agencies _____

Date to SCH _____

Clearance Date _____

Notes:

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California Coastal Commission 45 Fremont Street, Suite 2000 San Francisco, CA 94105-2219	National Marine Fisheries Serv. *** Southwest Regional Office 501 W. Ocean Blvd. Long Beach, CA 90802-4213		
Dept. of Conservation 801 K Street, MS-24-02 Sacramento, CA 95814	U.S. Fish and Wildlife Service *** Mid-Pacific Region 2800 Cottage Way, Room W-2605 Sacramento, CA 95825		
Dept. of Parks and Recreation *** Resource Mngmt. Div. P.O. Box 942896 Sacramento, CA 94296-0001	U.S. Bureau of Reclamation *** Mid-Pacific Region 2800 Cottage Way Sacramento, CA 95825-1898		
Reclamation Board 1416 Ninth Street, Room 1601 Sacramento, CA 95814	NRCS *** West Region Office 430 G Street, Ste. 4165 Davis, CA 95616		
Dept of Fish and Game *** Environmental Services Division 1416 Ninth Street, 13 th Floor Sacramento, CA 95814	U.S.E.P.A. *** Region 9 75 Hawthorne Street San Francisco, CA 94105		
State Lands Commission *** 100 Howe Ave, Suite 100-S Sacramento, CA 95825	CA Dept of Fish and Game *** 1416 Ninth Street Sacramento, CA 95814		
Delta Protection Commission P.O. Box 530 Walnut Grove, CA 95690	CA Dept of Pesticide Reg *** 1001 I Street, P.O. Box 4015 Sacramento, CA 95812-4015		
Dept of Toxic Substances Control CEQA Tracking Center 400 P Street, Fourth Floor P.O. Box 806 Sacramento, CA 95812-0806	CA Dept of Water Resources *** P.O. Box 942836 Sacramento, CA 94236		
CA Dept of Food and Ag 1220 N Street, Rm 452 Sacramento, CA 95814	UC Davis, Sid England *** Office of Resources Mngmt & Plan. 376 Mrak Hall One Shields Ave. Davis, CA 95616		

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Preparation of an Environmental Impact Report
Irrigated Agricultural Runoff

ID	Task Name	Start	End	Duration	2003												2004					2005								
					Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
1	Prepare Notice of Preparation (NOP)	1/1/2003	1/31/2003	4.60w																										
2	Circulate NOP for comments	2/3/2003	3/31/2003	8.20w																										
3	EIR RFP Preparation	1/1/2003	4/25/2003	16.60w																										
4	State Board Contracts Unit Review	4/28/2003	6/12/2003	6.80w																										
5	Advertising	6/2/2003	8/1/2003	9w																										
6	Proposals Received	8/1/2003	8/1/03	0.20w																										
7	Rate Proposals	8/18/2003	8/29/2003	2w																										
8	Award Contract	9/1/2003	9/1/03	0.20w																										
9	Contract Prepared and Executed	9/1/2003	10/30/2003	8.80w																										
10	Contractor Prepares Draft EIR	11/3/2003	4/1/2004	21.80w																										
11	Board Internal Review Draft	3/1/2004	3/19/2004	3w																										
12	Comments to Contractor	3/22/2004	3/30/2004	1.40w																										
13	Contractor prepares final Draft EIR	3/30/2004	5/28/2004	8.80w																										
14	Public Circulation of Draft EIR	6/1/2004	7/30/2004	8.80w																										
15	Comments reviewed / to contractor	8/2/2004	8/27/2004	4w																										
16	Contractor prepares Final EIR	8/27/2004	10/27/2004	8.80w																										
17	Agenda Item preparation	10/27/2004	11/25/2004	4.40w																										
18	Circulate Agenda Item	11/25/2004	12/24/2004	4.40w																										
19	Board Meeting	1/25/2005	1/25/05	0.20w																										
20	File Notice of Completion	2/10/2005	2/10/05	0.20w																										

**MATRIX OF RESOURCES MANAGEMENT PRACTICES
FOR CONTROLLING AGRICULTURAL
NONPOINT SOURCE POLLUTION**
April 2003

Pest Management Strategies

<i>Management Measure Category</i>	<i>Description of Management Measure</i>	<i>Commodity Grouping</i>	<i>Reference</i>	<i>Resource Access</i>
Water Quality Management Strategies for Diazinon <ul style="list-style-type: none"> • Alternate year dormant OP with yearly horticultural oil spray • Conventional dormant non-OP insecticides and horticultural oil spray • Horticultural oil alone dormant spray • Spinosad and horticultural oil as a dormant spray • Bloomtime sprays of <i>Bacillus thuringiensis</i> for Peach Twig Borer • Pheromone mating disruption for Peach Twig Borer 	Identification and evaluation of organophosphate pesticide management practices for orchard sprays, including advantages and disadvantages of each management practice.	<ul style="list-style-type: none"> • Stone Fruit • Almonds 	Sacramento River Watershed Program OP Pesticide Focus Group. Water Quality Management Strategies for Diazinon – Chapter 4. <i>Identification and Evaluation of OP Pesticide Management Practices for Orchard Dormant Sprays.</i> 25 September 2002	http://www.sacriver.org/subcommittees/op/documents/WQMSD_Draft/Ch4_AgPractices.html

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<i>Management Measure Category</i>	<i>Description of Management Measure</i>	<i>Commodity Grouping</i>	<i>Reference</i>	<i>Resource Access</i>
Alternatives to Chlorpyrifos and Diazinon Dormant Sprays <ul style="list-style-type: none"> No dormant spray Alternate year dormant OP with yearly horticultural oil spray Conventional dormant non-OP insecticides and horticultural oil spray Horticultural oil alone dormant spray Spinosad and horticultural oil as a dormant spray Bloomtime sprays of <i>Bacillus thuringiensis</i> Pheromone mating disruption 	<p>Compares and contrasts conventional dormant sprays with alternative options including comments on economics, efficacy, and environmental risk.</p>	<ul style="list-style-type: none"> Stone Fruit Almonds 	Statewide IPM Project, Water Resources Center and Ecotoxicology Program, University of California, Davis. <i>Alternatives to Chlorpyrifos and Diazinon Dormant Sprays. Final Report.</i> September 1999.	http://www.ipm.ucdavis.edu/PDF/PUBS/dormantsprayalternatives.pdf
National Management Measures to Control Nonpoint Source Pollution from Agriculture <ul style="list-style-type: none"> Pesticide management 	<p>A final draft technical guidance and reference in the implementation of economically achievable means of reducing nonpoint source pollution from agriculture.</p>	<ul style="list-style-type: none"> All 	US Environmental Protection Agency. 12 December 2002.	http://www.epa.gov/owow/nps/agmm/index.html
CORE4 Conservation Practices Training Guide <ul style="list-style-type: none"> Pesticide management 	<p>A common sense approach to reducing nonpoint source agricultural runoff.</p>	<ul style="list-style-type: none"> All 	USDA Natural Resources Conservation Service. August 1999.	http://www.nrcs.usda.gov/tech_nical/ECS/agronomy/core4.pdf

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Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
Draft Program of Implementation for the Control of Diazinon in the Sacramento and Feather Rivers <ul style="list-style-type: none"> • No dormant spray • Alternate year dormant OP with yearly horticultural oil spray • Conventional dormant non-OP insecticides and horticultural oil spray • Horticultural oil alone dormant spray • Spinosad and horticultural oil as a dormant spray • Bloomtime sprays of <i>Bacillus thuringiensis</i> for Peach Twig Borer • Pheromone mating disruption for Peach Twig Borer 	<p>A report describing alternative management strategies and frameworks for implementation of alternative pest management approaches that could be applied for controlling runoff of diazinon to the Sacramento and Feather Rivers.</p>	<ul style="list-style-type: none"> • Stone Fruit • Almonds 	<p>Regional Water Quality Control Board, Central Valley Region. <i>Draft Program of Implementation for the Control of Diazinon in the Sacramento and Feather Rivers</i>. May 2002.</p>	<p>http://www.swrcb.ca.gov/nwqcb5/programs/tmdl/sac_feather_diaz/draft_implementation.pdf</p>

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Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
Dormant Spray Alternatives Calculator <ul style="list-style-type: none"> • No dormant spray • Alternate year dormant OP with yearly horticultural oil spray • Conventional dormant non-OP insecticides and horticultural oil spray • Horticultural oil alone dormant spray • Spinosad and horticultural oil as a dormant spray • Bloomtime sprays of <i>Bacillus thuringiensis</i> for Peach Twig Borer • Pheromone mating disruption for Peach Twig Borer 	<p>Compare and contrast costs of traditional and alternative reduced risk pest control practices in stone fruit and almonds.</p>	<ul style="list-style-type: none"> • Stone Fruit • Almonds 	<p>University of California, California Almond Board, California Department of Pesticide Regulation – Pest Management Alliance Program.</p>	<p>http://www.lookercomm.com/almondpma/Newsletter/Spring2000/dormant.htm</p>
Integrated Prune Farming	<p>Website tracking progress of the Integrated Prune Farming project including annual progress reports on reduced risk pesticide and sustainable demonstration dried plum orchard projects.</p>	<ul style="list-style-type: none"> • Dried plums 	<p>University of California, California Dried Plum Board, California Department of Pesticide Regulation – Pest Management Alliance Program.</p>	<p>http://www.agresearch.nu/ipfp.htm</p>
Almond Industry Pest Management Alliance	<p>Website tracking progress of the Almond Pest Management Alliance</p>	<ul style="list-style-type: none"> • Almonds 	<p>University of California, California Almond Board, California Department of</p>	<p>http://www.lookercomm.com/AlmondPMA/almondPMA.htm</p>

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	including reports on reduced risk pesticides and sustainable almond orchard practices.		Pesticide Regulation – Pest Management Alliance Program.	
Stone Fruit Pest Management Alliance	Website tracking progress of the Stone Fruit Pest Management Alliance including progress reports, pest monitoring, and information on reduced risk pesticide and sustainable orchard practices.	<ul style="list-style-type: none"> • Peaches • Plums • Nectarines 	University of California, California Tree Fruit Agreement, California Cling Peach Advisory Board, California Department of Pesticide Regulation – Pest Management Alliance Program.	http://www.uckac.edu/treefruit/pm/
Database of Stone Fruit Research <ul style="list-style-type: none"> • Pest Management • Disease Management • Nutrient Management 	A searchable database of research reports for stone fruit.	<ul style="list-style-type: none"> • Stone fruit 	California Tree Fruit Agreement.	http://www.caltreefruit.com/research/research.asp?action=report
Kern and Tulare Counties IPM Demonstration Projects	Website for accessing information on the Citrus Pest Management Alliance project including information on sustainable orchard practices.	<ul style="list-style-type: none"> • Citrus 	University of California, California Citrus Research Board, California Department of Pesticide Regulation – Pest Management Alliance Program.	http://citrusent.uckac.edu/
California Walnut IPM Expansion Project	Website for accessing information on the Walnut Pest Management Alliance Project including information on sustainable orchard practices.	<ul style="list-style-type: none"> • Walnuts 	California Walnut Marketing Board, Center for Agricultural Partnerships, University of California, California Department of Pesticide Regulation – Pest Management Alliance.	http://www.agcenter.org/calif1/calif1.htm

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Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
Lodi-Woodbridge Sustainable Viticulture Program	Website for accessing sustainable viticulture practices and information on vineyard demonstration projects.	<ul style="list-style-type: none"> Wine grapes 	Lodi-Woodbridge Winegrape Commission, University of California, California Department of Pesticide Regulation.	http://www.lodiwine.com/sustainableviticulture1.shtml
Pest Management Alliance Program	Website for accessing information on current and past pest management alliance projects including the adoption of pest management practices that reduce the overall risk from the use of pesticides.	<ul style="list-style-type: none"> Various 	California Department of Pesticide Regulation.	http://www.cdpr.ca.gov/docs/empm/alliance/overview.htm
Pest Management Grants Program	Website for accessing information on current and past applied and demonstration pest management grant projects.	<ul style="list-style-type: none"> Various 	California Department of Pesticide Regulation.	http://www.cdpr.ca.gov/docs/empm/grants/grntfinl.htm
UCIPM – UC Pest Management Guidelines	Pest management guidelines from the University of California	<ul style="list-style-type: none"> All 	University of California - Division of Agriculture and Natural Resources.	http://www.ipm.ucdavis.edu
Ag Practices and Technologies Draft Report <ul style="list-style-type: none"> Pest Management Practices 	Agricultural management practices and technologies that have the potential to reduce offsite movement of OP pesticides from orchard and field crops.	<ul style="list-style-type: none"> All 	California Regional Water Quality Control Board Central Valley Region. <i>Ag Practices and Technologies Draft Report</i> . May 2002.	http://www.swrcb.ca.gov/nwqcb5/programs/tmdl/ag_practices_report.pdf

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California Agriculture	News and peer reviewed research from the University of California in agriculture and natural resources.	<ul style="list-style-type: none"> All 	University of California – Division of Agriculture and Natural Resources.	http://danr.ucop.edu/calag/
Almond Biologically Integrated Orchard Systems (BIOS)	Final report comparing and contrasting conventional almond pest management practices with integrated orchard system practices.	<ul style="list-style-type: none"> Almonds 	Bentley, Walt. University of California, Kearney Agricultural Center. <i>Almond Biologically Integrated Orchard Systems (BIOS) and Conventional Almond Pest Management: A Comparative Study</i> . 31 March 1999.	http://www.cdpr.ca.gov/docs/e/mpm/grants/97-98/finlrpts/97-0232.pdf
Almond Management Practices <ul style="list-style-type: none"> BIOS Peach twig borer Naval orange worm Ants 	A comparison of pest damage between Biologically Integrated Orchard Systems (BIOS) and conventional pest management systems.	<ul style="list-style-type: none"> Almonds 	Bentley, Walt J., et. al. BIOS and Conventional Almond Orchard Management Compared.	University of California Division of Agriculture and Natural Resources. California Agriculture. Volume 55, Number 5. September – October 2001. pp 12-19.
Pheromone Mating Disruption <ul style="list-style-type: none"> Oriental fruit moth Peach twig borer Organophosphates Pyrethroids 	A technical report discussing the efficacy of using pheromone mating disruption to successfully control damage from oriental fruit moth and peach twig borer.	<ul style="list-style-type: none"> Stone Fruit Pome Fruit Walnuts Almonds 	Pickel, Carolyn, Janine Hasey, Walt Bentley, William H. Olson, and Joe Grant. <i>Pheromones Control Oriental Fruit Moth and Peach Twig Borer in Cling Peaches</i> .	University of California Division of Agriculture and Natural Resources. California Agriculture. Volume 56, Number 5. September – October 2002. pp 170-175.

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Soil Solarization				
• Disease control	Discusses the use of plastic sheeting to solarize soil as a nonpesticidal method for controlling soilborn pests.	• All	Elmore, Clyde L., et al. <i>Soil Solarization – A Nonpesticidal Method for Controlling Diseases, Nematodes, and Weeds</i> .	University of California Division of Agriculture and Natural Resources. Publication 21377. 1977.
• Pre-plant nematode control				
• Weed control				
Weed Management				
• Mulches	Compares and contrasts weed management systems in controlling weeds in vineyards.	• Vineyard systems	Elmore, Clyde L., John Roncoroni, Layne Wade, and Paul Verdegall. <i>Mulch Plus Herbicides Effectively Control Vineyard Weeds</i> .	University of California Division of Agriculture and Natural Resources. California Agriculture. Volume 51, Number 2. March-April 1997. pp 14-18.
• Pre-emergence herbicides				
• Post-emergence herbicides				
Weed Management				
• Sheep grazing	Compares and contrasts the use of herbicides and sheep grazing for controlling weeds in seedling alfalfa.	• Alfalfa	Bell, Carl E. and Juan N. Guerrero. <i>Sheep Grazing Effectively Control Weeds in Seedling Alfalfa</i> .	University of California Division of Agriculture and Natural Resources. California Agriculture. Volume 51, Number 2. March-April 1997. pp 19-23.
Weed Management				
• Simazine	A technical paper comparing and contrasting the offsite movement of simazine from citrus orchard middles with and without mechanical incorporation.	• Citrus	Troiano, J. and C. Garretson. <i>Movement of Simazine in Runoff Water from Citrus Orchard Row Middles as Affected by Mechanical Incorporation</i> .	Journal of Environmental Quality. Volume 27. 1998. pp 4488-4494.
• Pre-emergence herbicides				
• Mechanical incorporation				

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Choosing an Insecticide <ul style="list-style-type: none"> • Egyptian alfalfa weevil • Organophosphate • Pyrethroids 	<p>A technical report comparing the impact of commonly used insecticides on water quality and toxicity to <i>Ceriodaphnia dubia</i> for controlling Egyptian alfalfa weevil.</p>	<ul style="list-style-type: none"> • Alfalfa 	Freeman Long, Rachel, et. Al. <i>Insecticide Choice for Alfalfa May Protect Water Quality</i> .	University of California Division of Agriculture and Natural Resources. California Agriculture. Volume 56, Number 5. September - October 2002. pp 163-169.
Nematode Management Options <ul style="list-style-type: none"> • Fumigants • Contact pesticides • Host plant resistance • Crop rotation 	<p>A technical discussion comparing and contrasting methods for controlling root-knot nematodes in San Joaquin Valley cotton.</p>	<ul style="list-style-type: none"> • Cotton 	Goodell, P.B. and J.W. Eckert. University of California Cooperative Extension, Kearney Agricultural Center. <i>Evaluation of Root-Knot Nematode Management Options in San Joaquin Valley Cotton</i> .	Proceedings of the Beltwide Cotton Conference. Volume 1:143-145. National Cotton Council, Memphis TN. 1998.
Nematode Management <ul style="list-style-type: none"> • Resistant varieties 	<p>A technical paper discussing the efficacy of the cotton cultivar, NemX, in suppressing populations of root-knot nematode.</p>	<ul style="list-style-type: none"> • Cotton 	Ogallo, Juma L., et. Al. <i>Management of Root-Knot Nematodes with Resistant Cotton cv. NemX</i> .	Crop Science. Vol. 39, No. 2. 1999. pp 418-421.
Organic Cotton Production	<p>A technical report comparing and contrasting production, quality, and pest pressures between organic and conventional cotton production systems.</p>	<ul style="list-style-type: none"> • Cotton 	Swezey, Sean L., et al. <i>Preliminary Studies Show Yield and Quality Potential of Organic Cotton</i> .	University of California Division of Agriculture and Natural Resources. California Agriculture. Volume 53, Number 4. July – August 1999. pp 9-16.
Integrated Pest Management Field Handbook for Winegrowing and Sustainable Winegrowing Practices	<p>A complete field handbook with integrated pest management strategies for controlling primary pests and diseases in wine grapes.</p>	<ul style="list-style-type: none"> • Wine grapes • Table grapes • Raisin grapes 	Integrated Pest Management Field Handbook for Napa County. Integrated Sustainable Winegrowing Group. 6 November 2002.	http://www.nswg.org/englishpublications2.htm

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Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
Augmentative Release of Beneficial Insects <ul style="list-style-type: none"> • Codling moth • <i>Trichogramma</i> wasp 	<p>A technical report discussing the efficacy of augmentative release of the parasitoid wasp <i>Trichogramma</i> for reducing Codling moth damage in selected orchard settings.</p>	<ul style="list-style-type: none"> • Walnuts • Almonds • Pome fruit 	<p>Mills, Nick, et.al. <i>Mass Releases of Trichogramma Wasps Can Reduce Damage from Codling Moth</i>.</p>	<p>University of California Division of Agriculture and Natural Resources. California Agriculture. Volume 54, Number 6. November-December 2000. pp 22-25.</p>
Biologically Integrated Farming Systems	<p>Website for accessing information on current and past Biologically Integrated Farming Systems projects including strategies for reducing the dependence on pesticides and the overuse of fertilizers.</p>	<ul style="list-style-type: none"> • Various 	<p>University of California, Davis. Sustainable Research and Education Program.</p>	<p>http://www.sarep.ucdavis.edu/bifs/</p>
Rice Project <ul style="list-style-type: none"> • Pest management • Disease control • Weed management 	<p>Website for accessing information on current and past Biologically Integrated Farming Systems projects for rice including strategies for controlling pest and disease pressure.</p>	<ul style="list-style-type: none"> • Rice 	<p>University of California, Division of Agricultural and Natural Resources, Cooperative Extension.</p>	<p>http://agronomy.ucdavis.edu/uocerice/</p>
Management Practices for Controlling Pollutants in Irrigated Agriculture <ul style="list-style-type: none"> • Pesticides • Nutrients • Salinity 	<p>A report that provides an overview review and guidance on the literature available to access best management practices that can be used to control the discharge of agriculturally derived pollutants.</p>	<ul style="list-style-type: none"> • All 	<p>Lee, G. Fred and Anne Jones-Lee. <i>Review of Management Practices for Controlling the Water Quality Impacts of Potential Pollutants in Irrigated Agriculture Stormwater Runoff and Tailwater Discharges</i>. California Water Institute, California State University, Fresno. December 2002.</p>	<p>http://www.gfredlee.com/BMP/Rpt.pdf</p>

On Site Practices for Runoff Control

Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
Water Quality Management Strategies for Diazinon <ul style="list-style-type: none"> • Cover crops • Conservation buffers • Hedgerows • Reducing and/or eliminating the bare herbicide zone under stone fruit • Managing water • Soil improvement and increasing infiltration/water retention 	<p>Identification and evaluation of onsite management practices to reduce off site movement of contaminants in runoff.</p>	<ul style="list-style-type: none"> • Stone Fruit, Pome Fruit • Nuts • Citrus • Table, Raisin, and Wine grapes • Other Specialty Fruits (kiwi, figs, pomegranate, etc.) • Other Tree Crops (avocado, olive, etc.) 	<p>Sacramento River Watershed Program OP Pesticide Focus Group. Water Quality Management Strategies for Diazinon – Chapter 4. <i>Identification and Evaluation of OP Pesticide Management Practices for Orchard Dormant Sprays.</i> 25 September 2002.</p>	<p>http://www.sacriver.org/subcommittees/op/documents/WQMMSD_Draft/Ch4_AgPractices.html</p>
Conservation Buffers to Reduce Pesticide Losses <ul style="list-style-type: none"> • Grassed waterways • Contour buffer strips • Vegetative barriers • Field borders • Filter strips • Constructed wetlands 	<p>Discusses the planning, planting, and maintenance of land strips in permanent vegetation to prevent erosion, trap sediments and nutrients, and increase the soil water infiltration rate.</p>	<ul style="list-style-type: none"> • All 	<p>USDA Natural Resources Conservation Service. March 2000.</p>	<p>http://www.wcc.nrcs.usda.gov/water/quality/common/pestmg/files/newconbuf.pdf</p>

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Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
Cover Crop <ul style="list-style-type: none"> Grasses Legumes Forbes Herbaceous plants 	<p>Provides information on establishing seasonal cover vegetation in middles to reduce erosion, increase soil organic matter, manage excess nutrients in the soil profile, reduce offsite movement of crop protection materials, and bolster weed suppression.</p>	<ul style="list-style-type: none"> All 	<p>USDA Natural Resources Conservation Service. February 2000.</p>	<p>ftp://ftp.ftw.nrcs.usda.gov/pub/nhcp/pdf/340.pdf</p>
Irrigation Water Management	<p>Identification of practices to control the volume, frequency, and application rate of irrigation water to optimize the use of available water supplies, minimize erosion, decrease nonpoint source pollution of surface and groundwater resources, and manage salts in the crop root zone.</p>	<ul style="list-style-type: none"> All 	<p>USDA Natural Resources Conservation Service. March 1999.</p>	<p>ftp://ftp.ftw.nrcs.usda.gov/pub/nhcp/pdf/449.pdf</p>
Constructed Wetlands <ul style="list-style-type: none"> Vegetation Water budget Topography Inlet Operation and maintenance 	<p>Provides information for planning and developing constructed wetlands to reduce the pollution potential of runoff and wastewater from agricultural lands to water resources.</p>	<ul style="list-style-type: none"> All 	<p>USDA Natural Resources Conservation Service. August 2000.</p>	<p>ftp://ftp.ftw.nrcs.usda.gov/pub/nhcp/pdf/656.pdf</p>

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National Management Measures to Control Nonpoint Source Pollution from Agriculture <ul style="list-style-type: none"> Erosion and sediment control Grazing Management Irrigation water management Nutrient management 	<p>A final draft technical guidance and reference in the implementation of economically achievable means of reducing nonpoint source pollution from agriculture.</p>	<ul style="list-style-type: none"> All 	<p>US Environmental Protection Agency. 12 September 2002.</p>	<p>http://www.epa.gov/owow/nps/agmm/index.html</p>
CORE4 Conservation Practices Training Guide <ul style="list-style-type: none"> Conservation tillage Buffer strips Nutrient management 	<p>A common sense approach to reducing nonpoint source agricultural runoff.</p>	<ul style="list-style-type: none"> All 	<p>USDA Natural Resources Conservation Service. August 1999.</p>	<p>http://www.nrcs.usda.gov/tech_nical/ECS/agronomy/core4.pdf</p>
Conservation Tillage <ul style="list-style-type: none"> Ridge till Mulch till Reduced till 	<p>Information on tillage and planting systems including a checklist for choosing the appropriate tillage method based on crop rotation, soil type, and other site specific factors.</p>	<ul style="list-style-type: none"> Row crops Grains 	<p>Conservation Technology Information Center – CORE4. December 2002.</p>	<p>http://www.ctic.purdue.edu/Core4/CT/CT.html</p>

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Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
30 Conservation Choices <ul style="list-style-type: none"> • Filter strip • Crop residue management • Cover crop • Grassed waterway • Wetland 	A guide to 30 conservation and environmental farming practices.	<ul style="list-style-type: none"> • All 	Conservation Technology Information Center – CORE4.	http://www.ctic.purdue.edu/Core4/CT/Choices/Choices.html
Residue Management, No Till, and Strip Till	Information on managing the amount, orientation, and distribution of crop and other plant residues on the soil surface to mitigate soil erosion, improve or maintain water infiltration rates, and reduce nonpoint source runoff.	<ul style="list-style-type: none"> • All 	USDA Natural Resources Conservation Service. February 2000.	http://www.id.nrcs.usda.gov/EngdwnId/standards/329a.pdf
Residue Management, Mulch Till	Information on managing the amount, orientation, and distribution of crop and other plant residues where the entire field surface is tilled prior to planting to mitigate soil erosion, improve or maintain water infiltration rates, and reduce nonpoint source runoff.	<ul style="list-style-type: none"> • All 	USDA Natural Resources Conservation Service. February 2002.	http://www.id.nrcs.usda.gov/EngdwnId/standards/329b.pdf

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Residue Management, Seasonal	Information on managing the amount, orientation, and distribution of crop and other plant residues on the soil surface during part of the year while growing crops in a clean tilled seedbed to mitigate soil erosion, improve or maintain water infiltration rates, and reduce nonpoint source runoff.	<ul style="list-style-type: none"> All 	USDA Natural Resources Conservation Service. February 1999.	http://www.id.nrcs.usda.gov/EngdwnId/standards/344.pdf
Nutrient Management	A comprehensive website with tips for developing a nutrient management plan to increase the efficiency of all crop nutrient sources while minimizing nonpoint source pollution of surface and groundwater.	<ul style="list-style-type: none"> All 	Conservation Technology Information Center – CORE4. September 2001.	http://www.ctic.purdue.edu/Core4/nutrient/nutrmgmt.html
Conservation Buffers <ul style="list-style-type: none"> Contour buffer strips Field border Grassed waterways Riparian buffers Windbreaks 	A comprehensive website with information on establishing and maintaining permanent vegetative strips designed to slow water runoff and stabilize riparian areas.	<ul style="list-style-type: none"> All 	Conservation Technology Information Center – CORE4.	http://www.ctic.purdue.edu/Core4/buffer/Definition.html

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<i>Management Measure Category</i>	<i>Description of Management Measure</i>	<i>Commodity Grouping</i>	<i>Reference</i>	<i>Resource Access</i>
Buffers, Common Sense Conservation <ul style="list-style-type: none"> • Contour grass strips • Riparian buffers • Grassed waterways • Field borders • Salt tolerant vegetation 	A website with NRCS publications on establishing and maintaining vegetative strips.	<ul style="list-style-type: none"> • All 	USDA Natural Resources Conservation Service.	http://www.nrcs.usda.gov/feature/buffers/BufrsPub.html
Drainage Water Management	Discusses controlling irrigation water surface elevations and discharge from surface and subsurface drainage systems to minimize erosion and decrease nonpoint source pollution of surface and groundwater resources.	<ul style="list-style-type: none"> • All 	USDA Natural Resources Conservation Service. September 2001.	ftp://ftp.ftw.nrcs.usda.gov/pub/nhcn/pdf/554.pdf
Ag Practices and Technologies Draft Report <ul style="list-style-type: none"> • Vegetation management • Water management • Soil management 	Agricultural management practices and technologies that have the potential to reduce offsite movement of OP pesticides from orchard and field crops.	<ul style="list-style-type: none"> • All 	California Regional Water Quality Control Board Central Valley Region. <i>Ag Practices and Technologies Draft Report</i> . May 2002.	http://www.swrcb.ca.gov/nwqcb5/programs/tmdl/ag_practices_report.pdf
California Agriculture	News and peer reviewed research from the University of California in agriculture and natural resources.	<ul style="list-style-type: none"> • All 	University of California – Division of Agriculture and Natural Resources.	http://danr.ucop.edu/calag/

Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
Cover Cropping in Orchards and Vineyards	Slide show discussing the benefits and drawbacks of planning and maintaining an orchard or vineyard floor cover crop system.	<ul style="list-style-type: none"> • Stone fruit, Pome fruit • Nuts • Table raisin, and wine grapes • Other Specialty Fruits (kiwi, figs, pomegranate, etc.) • Other Tree Crops (avocado, olive, etc.) 	University of California – Sustainable Agriculture Research and Education Program.	http://www.sarep.ucdavis.edu/ccrop/slideshows/tvshow01.htm
Cover Cropping in Row and Field Crop Systems	Slide show discussing the benefits and drawbacks of planning and maintaining a cover crop system in row and field crops.	<ul style="list-style-type: none"> • Row Crops • Field Crops 	University of California – Sustainable Agriculture Research and Education Program.	http://www.sarep.ucdavis.edu/ccrop/slideshows/rfshow01.htm
Cover Cropping in Vineyard Ecosystems	Technical report discussing the economics of popular cover crop mixes and the effects of cover crops on soil microbial ecology and soil nutrient status.	<ul style="list-style-type: none"> • Vineyard Systems 	Ingels, Chuck. Effects of Cover Crops on a Vineyard Ecosystem in the Northern San Joaquin Valley. University of California Sustainable Agriculture Research and Education Program. September 2001.	http://www.sarep.ucdavis.edu/Grants/Reports/Ingels/Ingels9-17Prog2.htm
Cover Cropping in Vineyards	A handbook discussing how to plan and maintain a cover crop in vineyard systems to enhance vineyard performance and promote ecological stability.	<ul style="list-style-type: none"> • Vineyard Systems 	Cover Cropping in Vineyards: A Grower's Handbook.	University of California Division of Agriculture and Natural Resources. Publication 3338. 1998.

ATTACHMENT C
MATRIX OF MANAGEMENT MEASURES

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Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
Practices and Barriers for Water Quality Improvement in California Rice	Research project to demonstrate and assess effectiveness of recirculating, static, and conventional irrigation systems for water quality improvement.	<ul style="list-style-type: none"> Rice 	University of California, Davis. 23 April 1999.	http://agronomy.ucdavis.edu/uccerice/WATER/water.htm
Irrigation System, Tailwater Recovery	Discusses constructing an irrigation system so that facilities to collect, store, and transport irrigation tailwater for reuse have been installed in order to conserve irrigation water supplies and decrease nonpoint source pollution of surface and groundwater resources.	<ul style="list-style-type: none"> All 	USDA Natural Resources Conservation Service. April 2001.	http://www.fl.nrcs.usda.gov/flsstandards/fl447.pdf
Tailwater Ponds	Website discussing the benefits of collecting irrigation tailwater into ponds to decrease the probability sediment, excess nutrients, and chemicals will move off field and into roadside ditches, canals, and natural sloughs.	<ul style="list-style-type: none"> Row crops 	Yolo County Resource Conservation District.	http://www.yolorcd.ca.gov/ponds/tailwater/tailwater.html
Water Use Efficiency <ul style="list-style-type: none"> Tailwater retention ponds Cover crops Filter strips 	Final report discussing a one-year pilot program assessing the efficacy of using such water conservation practices as tailwater retention ponds, cover crops, and filter strips.	<ul style="list-style-type: none"> All 	Final Report. CALFED Water Use Efficiency Program. Yolo County Resource Conservation District. May 2002.	http://www.yolorcd.ca.gov

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MATRIX OF MANAGEMENT MEASURES

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Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
Anionic Polyacrylimide (PAM) Erosion Control	Discusses erosion control through the use of water soluble PAM to minimize or control irrigation induced erosion.	<ul style="list-style-type: none"> Furrow irrigated crops 	USDA Natural Resources Conservation Service. March 2001.	http://www.id.nrcs.usda.gov/EngdwnId/standards/450.pdf
Polyacrylimide for Surface Irrigation to Increase Nutrient Use Efficiency and Protect Water Quality	Technical information that discusses the efficacy of using polyacrylamide (PAM) polymer to nearly eliminate soil erosion and sediment loss produced during furrow irrigation that mitigates the loss of plant nutrients from the field and soil.	<ul style="list-style-type: none"> Furrow irrigated crops 	USDA Agricultural Research Service. 5 September 2001.	http://www.nps.ars.usda.gov/publications/publications.htm?SEQ_NO_115=125917
Contour Farming <ul style="list-style-type: none"> Cross slope Minimum row grade Maximum row grade Critical slope length 	Discusses contour farming practices to reduce sheet and rill erosion and the offsite movement of water-born contaminants.	<ul style="list-style-type: none"> All 	USDA Natural Resources Conservation Service. February 2002.	http://www.id.nrcs.usda.gov/EngdwnId/standards/330.pdf
Contour Buffer Strips <ul style="list-style-type: none"> Row grade Arrangement of strips Vegetation 	Discusses the use of narrow, permanent herbaceous cover established across the slope with parallel, wider cropped strips to reduce sheet rill erosion and the offsite movement of water-born contaminants.	<ul style="list-style-type: none"> All 	USDA Natural Resources Conservation Service. February 2000.	http://www.id.nrcs.usda.gov/EngdwnId/standards/332.pdf

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Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
60 Ways Farmers Can Protect Surface Water	Details the use of best management practices to manage crop residue throughout the year, control runoff water on steeply sloping land, use pesticides and fertilizers more effectively, and manage runoff from livestock buildings.	<ul style="list-style-type: none"> All 	University of Illinois, Natural Resources Management. August 1997.	http://www.thisland.uiuc.edu/60ways/60ways.html
Vegetative Filter Strips	Discusses the technical research and methodology used to evaluate the effectiveness of vegetative filter strips for the removal of sediment from agricultural runoff.	<ul style="list-style-type: none"> All 	Dillaha, T.A., R.B. Reneau, S. Mostaghimi, and D. Lee. <i>Vegetative Filter Strips for Agricultural Nonpoint Source Pollution Control</i> .	American Society of Agricultural Engineers. Vol. 32(2): March-April. 1989.
Vegetative Filter Strips	A technical paper evaluating the effectiveness of vegetative filter strips in controlling the offsite movement of sediment.	<ul style="list-style-type: none"> All 	Robinson, C.A., M. Ghaffarzadeh, and R.M. Cruse. <i>Vegetative Filter Strip Effects on Sediment Concentration in Cropland Runoff</i> .	Journal of Soil and Water Conservation. Vol. 50, No. 3. May - June 1996. pp. 227-230.
Practices for Irrigating and Fertilizing Cool Season Vegetables <ul style="list-style-type: none"> Scheduling irrigation Irrigation systems Nutrient management Crop rotation 	A guide to evaluate irrigation and nutrient management practices to minimize the offsite movement of nitrogen from cool season row crops.	<ul style="list-style-type: none"> Lettuce Broccoli Celery Cauliflower 	Pettygrove, G.S, et.al. <i>Best Management Practices for Irrigating and Fertilizing Cool-Season Vegetables</i> .	University of California Division of Agriculture and Natural Resources. Cooperative Extension. Monterey County. March 1993.

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Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
Management Practices for Controlling Pollutants in Irrigated Agriculture <ul style="list-style-type: none"> • Sediment • Biofilters • Erosion control 	<p>A report that provides an overview review and guidance on the literature available to access best management practices that can be used to control the discharge of agriculturally derived pollutants.</p>	<ul style="list-style-type: none"> • All 	<p>Lee, G. Fred and Anne Jones-Lee. Review of <i>Management Practices for Controlling the Water Quality Impacts of Potential Pollutants in Irrigated Agriculture Stormwater Runoff and Tailwater Discharges</i>. California Water Institute, California State University, Fresno. December 2002.</p>	<p>http://www.gfredlee.com/BMP_Rpt.pdf</p>
Conservation Buffers to Reduce Pesticide Losses	<p>A comprehensive document with information on establishing and maintaining permanent vegetative strips designed to slow water runoff, stabilize riparian areas, and reduce pesticide losses.</p>	<ul style="list-style-type: none"> • All 	<p>USDA Natural Resources Conservation Service. March 2000.</p>	<p>http://www.wcc.nrcs.usda.gov/water/quality/common/pestmgt/files/newconbuf.pdf</p>

Application Methods

Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
Water Quality Management Strategies for Diazinon <ul style="list-style-type: none"> • Mixing and loading • Spill prevention • Disposal • Sprayer calibration • Equipment repair and maintenance • Drift mitigation practices • Adjuvants • Setback/buffer zones • Application rates and spray volume • New equipment technology 	<p>Identification of practices to reduce the potential for over application and off site movement when applying crop protection materials.</p>	<ul style="list-style-type: none"> • Stone Fruit, Pome Fruit • Nuts • Citrus • Table, Raisin, and Wine grapes • Other Specialty Fruits (kiwi, figs, pomegranate, etc.) • Other Tree Crops (avocado, olive, etc.) 	<p>Sacramento River Watershed Program OP Pesticide Focus Group. Water Quality Management Strategies for Diazinon – Chapter 4. <i>Identification and Evaluation of OP Pesticide Management Practices for Orchard Dormant Sprays.</i> 25 September 2002.</p>	<p>http://www.sacriver.org/subcommittees/op/documents/WQMSD_Draft/Ch4_AgPractices.html</p>
Mixing and Loading Crop Sprayers	Practices for mixing and loading agricultural spray rigs to prevent spill that may pose a threat to water quality.	<ul style="list-style-type: none"> • All 	Coalition for Urban/Rural Environmental Stewardship (CURES)	http://www.curesworks.org/
Field and Row Crop Sprayers	Tips for applying crop protection products to prevent off target movement of crop protection materials.	<ul style="list-style-type: none"> • All 	Coalition for Urban/Rural Environmental Stewardship (CURES)	http://www.curesworks.org/

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Management Measure Category	Description of Management Measure	Commodity Grouping	Reference	Resource Access
Orchard Air Blast Sprayers	Tips and techniques to prevent off target movement of crop protection materials.	<ul style="list-style-type: none"> Stone Fruit, Pome Fruit Nuts Citrus Table, Raisin, and Wine grapes Other Specialty Fruits (kiwi, figs, pomegranate, etc.) Other Tree Crops (avocado, olive, etc.) 	Coalition for Urban/Rural Environmental Stewardship (CURES)	http://www.curesworks.org/
Nutrient Management <ul style="list-style-type: none"> Nutrient budget Soil testing 	Tips for managing the amount, source, placement, form, and timing of the application of nutrients and soil amendments to minimize nonpoint source pollution of surface and groundwater quality.	<ul style="list-style-type: none"> All 	USDA Natural Resources Conservation Service. April 1999.	ftp://ftp.ftw.nrcs.usda.gov/pub/nhcop/pdf/590.pdf
Ag Practices and Technologies Draft Report <ul style="list-style-type: none"> Pesticide application practices 	Agricultural management practices and technologies that have the potential to reduce offsite movement of OP pesticides from orchard and field crops.	<ul style="list-style-type: none"> All 	California Regional Water Quality Control Board Central Valley Region. <i>Ag Practices and Technologies Draft Report</i> . May 2002.	http://www.swrcb.ca.gov/nwqcb5/programs/tmdl/ag_practices_report.pdf
California Agriculture	News and peer reviewed research from the University of California in agriculture and natural resources.	<ul style="list-style-type: none"> All 	University of California – Division of Agriculture and Natural Resources	http://danr.ucop.edu/calag/

Commodity Outreach Contact List

Commodity Boards	Address	Phone #	Contact	Committee Mtg. Date
California Tree Fruit Agreement	975 I Street Reedley, CA 93654	559-638-8260	Blain Richardson	
California Canning Peach Assoc.	2300 River plaza Drive, Ste. 100 Sacramento, CA 95833	916-925-9131		3 April 2003 ?
California Pear Advisory Board	1521 I Street Sacramento, CA 95814	916-441-0432	Chris Zanobini	6 March 2003
California Dried Plum Board	3841 North Freeway Blvd., Ste. 120 Sacramento, CA 95834	916-565-6232		3 April 03 ? Dried Plum Board
California Table Grape Comm.	392 W. Fallbrook, Ste. 101 Fresno, CA 93711	559-447-8350	Chris Nave	
Lodi Woodbridge Winegrape	2545 W. Turner Road Lodi, CA 95242	209-367-4727	Mark Chandler	
Calif. Raisin Admin. Committee	3445 North First Street, Ste. 101 Fresno, CA 93726	559-225-0520	Ron Worthley	
California Almond Board	1150 9 th Street, St. 1500 Modesto, CA 95354	209-549-8262	Richard Waycott	15 May 2003 – Board Meeting
California Pistachio Commission	1318 E. Shaw Avenue, Ste. 420 Fresno, CA 93710-7912	559-221-8294		
California Walnut Commission	1540 Riverpark Drive, Ste. 203 Sacramento, CA 95815	916-646-3807	Dennis Balint	
California Citrus Research Board	323 Oak Street PO Box 23 Visalia, CA 93291	559-738-0607	Ted Batkin	12 March 2003 – Board Mtg.

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Commodity Outreach Contact List

April 2003

Commodity Boards	Address	Phone #	Contact	Committee Mtg. Date
California Citrus Quality Council	210 Magnolia Ave. Auburn, CA 95603	530-885-1894	Wally Ewart	30 January 2003 – Annual Mtg.
Calif. Cotton Ginners & Growers	1941 N. Gateway Blvd., Ste. 101 Fresno, CA 93727	559-252-0684	Earl Williams	11 June 2003 – Board Meeting
California Tomato Commission	1625 East Shaw Avenue, Ste 106 Fresno, CA 93710	559-230-0116		
California Processing Tomato	??	530-759-7501		
California Strawberry Comm.	180 Westridge Dr. PO Box 269 Watsonville, CA 95076	831-724-1301	Rodger Wasson	
California Apple Commission	4974 E. Clinton Way, Ste. 125 Fresno, CA 93727	559-456-0900	Kenton Kidd	
California Cherry Advisory Board	33 E. Oak St. Lodi, CA 95241	209-368-0685	Jim Culbertson	
California Fig Advisory Board	3425 N. First St. Ste. #109 Fresno, Ca. 93726	1-800-588-2344		
Olive Growers Council	121 E. Main Street, Ste. 2 Visalia, CA 93291	559-734-1710		
California Alfalfa and Forage Assoc.	36 Grande Vista Novato, CA 94947	415-892-0167	Aaron Kiess	
California Wheat Commission	P.O. Box 2267 Woodland, CA 95776-2267	530-661-1292	Bonnie Fernandez	25 March 2003 – Board Mtg.
California Assoc. Of Nurserymen (container nursery stock)	3947 Lennane Dr., Ste. 150 Sacramento, CA 95834	800-748-6214		

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Commodity Boards	Address	Phone #	Contact	Committee Mtg. Date
California Cut Flower Commission	135 Maher Road Watsonville, CA 95076 PO Box 4003 Aromas, CA 95004	831-728-7333	Lee Murphy	20 February 2003 – Exec. Com.
California Lettuce Research Board	512 Pajaro Street Salinas, CA 93901	831-424-3782		
Trade Organizations	Address	Phone #	Contact	Committee Mtg. Date
California Grape and Tree Fruit League	1540 East Shaw, Ste. 120 Fresno, CA 93710	559-226-6330	Fred Berry	23-25 March 2003 - Annual
California Assoc. Of Winegrape Growers	601 University Avenue, Ste. 135 Sacramento, CA 95825	800-241-1800	Karen Ross	1 Apr 2003 – PMA Mtg. 24 – 25 Apr 03 – Board Mtg.
California Citrus Mutual	512 N. Kaweah Avenue Exeter, CA 93221	559-592-3790	Joel Nelsen	
Western Growers Association	17620 Fitch Street Irvine, CA 92614 PO Box 2130 Newport Beach, CA 92658	949-863-1000	Tom Nassif	
Grower-Shipper Assoc. of Central Calif. (vegetables)	512 Pajaro Street Salinas, CA 93901	831-422-8844		
California Tomato Growers Assoc.	10730 Siskiyou Lane PO Box 7398 Stockton, CA 95267	209-478-1761		
San Joaquin Valley Quality Cotton	200 New Stine Rd, Ste. 115 Bakersfield, CA 93309	661-398-4333		

Trade Organizations		Address	Phone #	Contact	Committee Mtg. Date
California Grain and Feed Assoc.		1521 I St. Sacramento, CA 95814	916-441-2272	Richard Matteis	30 Apr – 3 May Annual Conf.
California State Floral Association		1521 I St. Sacramento, CA 95814	916-448-5266	Debbie Murdock	19 March 2003 - Workshop
California Waterfowl Association (gun clubs and managed wetlands)		4630 Northgate Blvd., Ste. 150 Sacramento, CA 95834	916-648-1406		
UC Cooperative Extension Programs		Address	Phone #	Contact	Mtg. Date
Kearney Ag Research Station		9240 South Riverbend Dr. Parlier, CA 93648			
Cotton IPM			559-646-6515	Dr. Peter Goddell	
Citrus IPM			559-646-6518	Dr. Beth Grafton-Cardwell	
Tree Fruit & Nuts IPM			559-646-6527	Walt Bentley	
County UC Cooperative Extension Programs		Address	Phone #	Contact	Mtg. Date
Amador Co.		1200 Airport Road Jackson CA, 95642-9527	209-223-6482		
Butte Co.		2279-B Del Oro Ave. Oroville, CA 95965	530-538-7140		
Calaveras Co.		891 Mountain Ranch Road, Government Center San Andreas CA, 95249	209-754-6477		

County UC Cooperative Extension Programs	Address	Phone #	Contact	Mtg. Date
Colusa Co.	100 Sunrise Blvd., Ste. E PO Box 180 Colusa, CA 95932	530-458-4625		
El Dorado Co.	311 Fair Lane Placerville CA, 95667	530-621-5502		
Fresno Co.	1720 South Maple Ave. Fresno, CA 93702	559-456-7285		
Glenn Co.	PO Box 697 Orland, CA 95963	530-865-1107		
Kern Co.	1031 South Mount Vernon Ave. Bakersfield, CA 93307	661-868-6208		
Kings Co.	680 North Campus Dr., Ste. A Hanford, CA 93230	559-582-3211 Ext. 2730		
Lake Co.	883 Lakeport Boulevard Lakeport CA, 95453	707-263-6838		
Madera Co.	328 Madera Ave. Madera, CA 93637	559-675-7879		
Merced Co.	2145 West Wardrobe Ave. Merced, CA 95340	209-385-7403		
Napa Co.	1710 Soscol Avenue, Ste. 4 Napa CA, 94559-1315	707-253-4221		
Placer-Nevada Co.	11477 E Avenue Auburn CA, 95603	530-889-7385		

County UC Cooperative Extension Programs	Address	Phone #	Contact	Mtg. Date
Sacramento Co.	4145 Branch Center Road Sacramento, CA 95827	916-875-6913		
San Joaquin Co.	420 South Wilson Way Stockton, CA 95205	209-468-2085		
Siskiyou Co.	1655 South Main Street Yreka CA, 96097	530- 842-2711		
Solano Co.	501 Texas Street Fairfield CA, 94533-4498	707-421-6790		
Stanislaus Co.	3800 Cornucopia Way, Ste. A Modesto, CA 95358	209-525-6800		
Sutter – Yuba Co.	142-A Garden Highway Sutter County Ag. Bldg. Yuba City, CA 95991	530-673-5368		
Tehama	1754 Walnut St. Red Bluff, CA 96080	530-527-3101		
Tulare Co.	4437 S. Laspina St., Ste. B Tulare, CA 93274	559-685-3303		
Tuolumne Co.	2 South Green Street Sonora CA, 95370	209-533-5695		
Yolo Co.	70 Cottonwood Street Woodland CA, 95695	530-666-8143		

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Farm Bureau	Address	Phone #	Contact	Mtg. Date
California Farm Bureau	2300 River Plaza Drive Sacramento, CA 95833	916-561-5500	Bill Pauli	
Amador Co. Farm Bureau	14545 Carriage Way P.O. Box 159 Jackson, CA 95642	209-223-9095	Jean Scanlon	
Butte Co. Farm Bureau	2580 Feather River Blvd. Oroville, CA 95965	530-533-1473	Jaimee Wood	
Calaveras Co. Farm Bureau	6455 Cane Lane Valley Springs, CA 95252	209-772-3987	Lorey Oliver	
Colusa Co. Farm Bureau	520 Market St., Ste. 1 P.O. Box 1179 Colusa, CA 95932	530-458-5130	Linda Eveland	
El Dorado Co. Farm Bureau	2460 Headington Road Placerville, CA 95667	530-622-7773	Valerie Zentner	
Fresno Co. Farm Bureau	1274 West Hedges Fresno, CA 93728	559-237-0263	Carla Fullerton	
Glenn Co. Farm Bureau	501 Walker St. Orland, CA 95963	530-865-9636	Staci Buttermore	
Kern Co. Farm Bureau	801 South Mount Vernon Ave. Bakersfield, CA 93307	661-397-9635	Loron Hodge	
Kings Co. Farm Bureau	870 Greenfield Ave. Hanford, CA 93230	559-584-3557	Kelly Deming	
Lake Co. Farm Bureau	65 Soda Bay Road Lakeport, CA 95453-5669	707-263-0911	Charles March	
Madera Co. Farm Bureau	1102 South Pine St. Madera, CA 93637	559-674-8871	Jason Baldwin	

Farm Bureau	Address	Phone #	Contact	Mtg. Date
Merced Co. Farm Bureau	646 South Highway 59 P.O. Box 1232 Merced, CA 95341	209-723-3001	Ed Pattison	
Modoc Co. Farm Bureau	108 East 1st Street P.O. Box 1692 Alturas, CA 96101	530-233-3276	Kathy Porter	
Napa Co. Farm Bureau	811 Jefferson Street Napa, CA 94559	707-224-5403	Sandra Elles	
Nevada Co. Farm Bureau	14550 Mt. Olive P.O. Box 43 Grass Valley, CA 95945	530-346-8146	C. Darlene Moberg	
Placer Co. Farm Bureau	10120 Ophir Road Newcastle, CA 95658	916-663-2929	Sandy Schwartzler	
Sacramento Co. Farm Bureau	8970 Elk Grove Blvd. Elk Grove, CA 95624	916-685-6958	Denny Lewis	
San Joaquin Co. Farm Bureau	3290 North Ad Art Way P.O. Box 8444 Stockton, CA 95208	209-931-4931	Russ Matthews	
Solano Co. Farm Bureau	2210 Boynton Ave., Ste. E Fairfield, CA 94533	707-425-8044	Mike Vukelich	
Stanislaus Co. Farm Bureau	1201 L St P.O. Box 3070 Modesto, CA 95353	209-522-7278	Vito Chiesa	
Tehama Co. Farm Bureau	645 Antelope Blvd., Ste. 17 Red Bluff, CA 96080	530-527-7882	Colleen Kinner	

Farm Bureau	Address	Phone #	Contact	Mtg. Date
Tulare Co. Farm Bureau	737 North Ben Maddox Way P.O. Box 748 Visalia, CA 93279	559-732-8301	Cheryl Lehn	
Tuolumne Co. Farm Bureau	220 Southgate Drive Sonora, CA 95370 P.O. Box 675 Jamestown, CA 95327	209-532-0300	Lettie Beeman	
Yuba-Sutter Co. Farm Bureau	475 Palora Ave. Yuba City, CA 95991	530-673-6550	Doris Joaquin	
Yolo Co. Farm Bureau	69 West Kentucky Ave. P.O. Box 1556 Woodland, CA 95776	530-662-6316	Denise Sagara	
Other Organizations	Address	Phone #	Contact	Committee Mtg. Date
Community Alliance with Family Farmers (CAFF)	36355 Russell Blvd. PO Box 363 Davis, CA 95617	530-756-8518	Leland Swenson	
California Sustainable Ag Working Group	P.O. Box 1599 Santa Cruz, CA 95061	831-457-2815	Stacie Clary	
California Certified Organic Farmers	1115 Mission Street Santa Cruz, CA 95060	831-423-2263		
UC Sustainable Ag Research Program (includes Biologically Integrated Farming Systems)	DANR Bldg., Hopkins Rd. One Shield Ave. Davis, CA 95616	530-752-2379	Sean Swezey	

Entities that could be directly involved in meeting conditions of the waiver:

Entity	Estimated Number	Discharger?	Fees/Funding	Comments
Growers (landowners and operators)	> 25,000 Estimated 25,000 growers in Region 5 - some are landowners, others are lessees; if staff must work with both, number of entities to work with will increase. Insufficient data collected at this time to provide an estimate of the total number.	Yes Both owners and operators are included within the term “discharger.” See discussion under “Issue 2” in staff report)	Fees can be imposed on dischargers. See discussion under “Issue 3” in staff report. If participating in a watershed group (with nonprofit status), depending upon funding source, can benefit from grant funding for watershed planning and implementation projects.	Sheer number of dischargers for this discharge category is one reason a watershed group or “Agricultural Water Quality Group” approach is being encouraged. In many cases, this approach could be more efficient for both the Regional Board and dischargers.
Water Districts	? As of 1994, 116 districts formed under special act; additionally, there are many districts formed under general acts (insufficient data collected at this time to provide an estimate of the total number). (See discussion on Water Districts)	Depends upon the authorities under which the district was formed and the functions it carries out- in many cases, yes. (See discussion on Water Districts)	Fees can be imposed on dischargers. See discussion under “Issue 3” in staff report. Districts can levy assessments – nature and amount varies depending upon the general or special act a district was formed under. Additionally, districts must comply with Proposition 218 (passed in 1996) which imposes new landowner approval procedures for benefit assessments on real property and for fees and charges imposed as an incident of property ownership. Depending upon funding source, these entities can be eligible for grant funding for watershed planning and implementation projects.	It appears numerous water districts are organizing and planning to participate and/or take leadership roles in “groups” for purposes of the waiver, which is encouraging. Water management will likely play a critical role in a comprehensive approach for managing the multiple constituents in agricultural discharges, thus it is beneficial and important that districts be involved. Local community linkages is another positive factor. Efforts that districts have initiated to address the waiver conditions should be allowed to progress.

Entity	Estimated Number	Discharger?	Fees/Funding	Comments
Joint Powers Authority (JPA)	? Depends upon whether any existing JPAs choose to get involved or new ones form for purposes of the waiver. An example of a JPA is the San Luis & Delta Mendota Water Authority, which consists of 32 water agencies representing approximately 2.1 million acres of federal and exchange water service contractors in the western San Joaquin Valley, San Benito and Santa Clara counties. (See discussion on Joint Powers Authority)	Would depend upon the authorities of the member agencies and functions the JPA undertakes - Maybe	?	The water districts that are organizing and planning to participate and/or take leadership roles in “groups” for purposes of the waiver may decide to form JPAs to formalize the groups they will be working in and levels of participation and responsibilities. Degree to which this may happen is unknown at this time.
Resource Conservation Districts (RCDs)	103 RCDs cover over 85% of the state. Some RCD boundaries match county boundaries, and some counties have multiple RCDs. There are close to 60 RCDs covering territory in Region 5.	Depends upon authorities, functions. In most cases, probably not.	Can levy assessments. See Public Resources Code, division 9. Depending upon funding source, these entities can be eligible for grant funding for watershed planning and implementation projects.	These are “special districts” of the state, established to be locally governed agencies with their own locally appointed or elected, independent boards of directors. Authorized under the Public Resources Code, division 9, areas they work in include watershed planning and management, water conservation, water quality protection and enhancement, agricultural land conservation, irrigation management These entities have long been involved in resource conservation activities and have strong local community links. As such, participation and/or leadership by RCDs would be beneficial.
Commodity Groups	There are around 39 advisory boards, councils	No	Depending on the funding source, these entities can be	These entities can be key partners. Provisions in the Food and Agricultural

Entity	Estimated Number	Discharger?	Fees/Funding	Comments
	and commissions operating under the California Food and Agricultural Code (agricultural marketing orders). Additionally there are federal marketing order boards and committees, and other commodity-based associations.		eligible for grant funding for management practice development, watershed planning and implementation projects.	Code (and related regulations) govern the types of activities marketing order groups can be involved in, and there may be limitations in a regulatory context. In addition to other areas, these entities could serve key roles relative to crop production and management practices. Some commodity-specific groups could take a lead role for purposes of the waiver.
County Agricultural Commissioners	Region 5 encompasses all or portions of 40 counties.	No	Depending on the funding source, these entities can be eligible for grant funding for watershed planning and implementation projects.	These entities can be key partners (participants or lead entities). (See discussion on Agricultural Commissioners)
Existing Watershed Groups	The UC Davis Information Center for the Environment (ICE) watershed group inventory currently lists about 680 groups statewide. Information has not been gathered regarding how many groups are active in Region 5. Redding, Fresno and Sacramento staff coordinate closely with over 30 locally directed watershed programs.	No	Nonprofit organizations, depending on the funding source, can be eligible for grant funding for watershed planning and implementation projects	These entities can be key participants/leaders. Unclear at this point how many existing watershed groups will step into role of fulfilling waiver conditions. Will likely vary depending upon locality. Regardless of participation in waiver-related activities, these entities can be key sources of local information relative to watershed assessment, planning and monitoring for groups working on meeting waiver conditions.

COMPONENTS FOR A STRUCTURED WATERSHED GROUP FORMATION AND FUNCTION

March 2003

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COMPONENTS FOR A STRUCTURED WATERSHED GROUP FORMATION AND FUNCTION

INTRODUCTION

On 5 December 2002, the California Regional Water Quality Control Board, Central Valley Region (Regional Board), adopted Resolution No. R5-2002-0201 – Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands. The waiver was adopted to address the legislative mandate of SB390 requiring all conditional waivers of waste discharge requirements to “sunset” on 1 January 2003, unless the Regional Board renewed the conditional waiver. Section 13269 of the California Water Code (CWC) allows the Regional Board to waive waste discharge requirements for a specific discharge or specific type of discharge if the following conditions are met: 1) the waiver is not against the public interest, 2) the waiver is conditional and may be terminated at any time, 3) compliance with waiver conditions are required, and 4) a public hearing has been held. The Regional Board determined these conditions were met and adopted the conditional waiver to expressly apply to persons who discharge irrigation return flows (both surface and subsurface drainage), storm water runoff, and operational spills to surface waters of the state. The conditional waiver is effective for two years commencing on 1 January 2003, and will expire 31 December 2004 unless renewed or extended by the Regional Board.

There are two categories of waivers of waste discharge requirements set forth in Resolution No. R5-2002-0201: one category applies to dischargers who participate in a group effort on a watershed level and the other category applies to individual dischargers who do not participate in a group watershed effort. Use of the watershed approach is a component of the Regional Board’s Strategic Plan and accordingly, the Regional Board recognizes the advantages of addressing water quality problems using the watershed group approach and encourages watershed programs. An effective watershed program has the potential for identifying and correcting water quality problems while maximizing the limited resources of the agricultural community, local stakeholders, and the State of California. However, the challenge of organizing and sustaining a watershed group to meet the conditions of the waiver may be a problematic task. Therefore, the following is offered to assist groups in anticipating and dealing with the complex elements that will need to be addressed in forming a watershed group capable of fulfilling the long-term conditions of the waiver and taking on the role of the “Discharger” on behalf of the owners and operators of irrigated lands that discharge wastewater and stormwater to surface water, waters of the State.

ELEMENTS OF A WATERSHED GROUP

Generally, a watershed describes a region draining into a river, river system or other body of water. A watershed group, for the purposes of complying with the conditional waiver, needs to establish an infrastructure to develop a Regional Board approved watershed and/or sub-

watershed level program to meet the terms of the conditional waiver. The first step in forming an effective watershed group is to identify those who will participate in the group. The second step is to develop a program plan that will satisfy the requirements of the conditional waiver. The plan should include all phases of watershed assessment, monitoring quality assurance program planning and implementation, overall program evaluation, and developing an outreach and education component for management practices if monitoring indicates it is necessary to reduce discharges of waste to acceptable levels. Finally, the watershed group needs to commit to the implementation of the plan and meet deliverable milestones for the Regional Board in order to allow dischargers to maintain a waiver.

Start-up

Because the timeline for submitting the conditional waiver deliverables to the Regional Board is compressed, interested stakeholders and other participants need to begin the start-up process for building a watershed group as soon as possible. The initial step may involve a single agency or other group with an interest in obtaining the conditional waiver who is willing to begin the procedure of attaining Regional Board approval for the watershed group. There are several key elements in the start-up process which are listed below.

- Define the watershed area. This includes a description of the geographic boundaries, natural resource conditions, land uses, and developing a detailed map of the watershed which needs to include drainage and agricultural discharge locations.
- Identify and involve all those individuals and groups within the watershed area with a stake in the waiver. The list could include landowners, operators, interest groups, local and government agencies, University of California, commodity boards, and others who may be potentially affected by the conditional waiver or be limited to members of the agricultural industry. The key is to establish a Regional Board approved watershed group where the dischargers actively participate in a program to manage discharges from irrigated lands and address water quality concerns on a local level.
- Assemble all pertinent information prior to the first meeting and circulate it among stakeholders and interested participants within the watershed group. This can be as simple as an agenda, or more elaborate and include fact sheets, maps, and other resources related to the watershed.
- Call the first meeting with the intent to identify and develop:
 - (1) How often the group will meet and where;
 - (2) A consensus the watershed group is committed to developing a program to meet the conditions set forth in the waiver (this may include the development of a mission statement);

- (3) A watershed group decision making process;
 - (4) A Memorandum of Understanding to establish the ability to pay group expenses, handle contracting matters, and meet other administrative obligations;
 - (5) A Joint Powers of Authority, or filing for incorporation to establish non-profit status (this may be necessary to demonstrate eligibility for certain categories of funding and would allow the group itself to enter into contracts);
 - (6) Who among the participants will be responsible for which management tasks necessary to maintain the day-to-day operations of the watershed group;
 - (7) Documentation of agreements and action items;
 - (8) Watershed group participants who have the authority to speak on behalf of their organization, agency, or special interest; and
 - (9) The lead organizations and key contacts for the watershed group who will develop the watershed program.
- Prepare a General Report for submission to the Regional Board by **1Septmeber 2003** that includes the following information:
 - (1) Identification of the lead agencies and/or organizations that will develop the watershed or sub-watershed program;
 - (2) Key contact(s);
 - (3) Identify all Dischargers within the Watershed which will participate in the Watershed Groups and comply with the terms and conditions of the Conditional Waiver;
 - (4) A general description of the watershed;
 - (5) A map of the watershed identifying the geographic boundaries, irrigated lands, and drainage and agricultural discharge locations;
 - (6) A commitment from the watershed group to work with the Regional Board to satisfy the conditions of the Conditional Waiver (example, Attachment A);
 - (7) A commitment from individuals who are not identified as a lead agency and/or organization to work with the watershed group for the purpose of fulfilling the conditions of the waiver (example, Attachment B); and

- Prepare Detailed Report which provides a description of the watershed to be submitted to the Regional Board by **31 March 2003**.

Watershed Program Planning Issues

The planning process for meeting the timeline for deliverables required by the waiver is vital. The watershed group needs to determine how it will generate deliverables and what type of project tracking will be necessary to keep the watershed group on target. This can include the formation of special committees within the watershed group, the need for entering into contracts with outside consulting firms, or assigning specific deliverables to participating agencies and/or organizations within the watershed group that have particular areas of expertise. The following two components may assist the watershed group in rapidly moving forward with the planning process.

- Roles and responsibilities of watershed group members should be identified and documented. This will help to facilitate and implement definite components of the planning process (requests for bids from consulting firms for developing program plans, monitoring plans, management practices research and outreach, etc.).
- Outline of funding and resource issues. Describe how the watershed group will be funded. A reliable long-term funding source is needed to operate the watershed group outside of grants, which may have been applied for, but not yet awarded. In addition, it should be determined who will be responsible for financial collections and payments with regard to administrative functions, implementing the monitoring quality assurance project plan, and management practice evaluation and development for the watershed group.

The purpose of the planning process is to develop a watershed program that will provide the Regional Board with written submittals that are timely, well organized, complete, and of professional quality. Therefore, the watershed group needs to propose specific objectives and document the procedure for achieving the timeline for deliverables required by the waiver and listed in Table 1 below. This information should also be incorporated into the watershed program plan.

TABLE 1
TIMELINE OF DELIVERABLES

<i>Deliverable</i>	<i>Description</i>	<i>Due Date</i>
Detailed Report	<ul style="list-style-type: none">• Components of sub-watershed showing which fields are served by which drain;	<ul style="list-style-type: none">• 31 March 2004

<i>Deliverable</i>	<i>Description</i>	<i>Due Date</i>
	<ul style="list-style-type: none"> • Information on crops grown in the watershed or sub-watershed area; • Pesticides used and other factors that may impact the quality of discharges; • Inventory of management practices that are in place and that are effective pollution control measures; • Historical water quality monitoring results; • Known water quality issues; and • Known programs addressing the water quality issues associated with discharges from irrigated lands. 	
Monitoring Program	<ul style="list-style-type: none"> • Assessment of the sources and impacts of waste in discharges from irrigated lands; • Track progress of current monitoring programs ongoing in the watershed; • Submit a comprehensive monitoring plan to the Regional Board for approval that includes a Quality Assurance Project Plan (QAPP) following the Regional Board QAPP requirements; and • Initiate the watershed monitoring program and begin submitting the data generated to the Regional Board. 	
Prioritization of Sub-Watersheds	<ul style="list-style-type: none"> • Identify in writing and 	

<i>Deliverable</i>	<i>Description</i>	<i>Due Date</i>
	submit to the Regional Board the priorities of the watershed group with respect to work on specific sub-watersheds and constituents of concern.	
Management Practices	<ul style="list-style-type: none"> • Compile existing information; • Monitor the success and evaluate the success of identified management practices 	
Implementation Plan	<ul style="list-style-type: none"> • Development and implementation plan for management practices; • Schedule for implementation plan of management practices; • Development and implementation of a grower education program; • Provide technical assistance such as serving as a management practices informational clearing house; and • Provide financial assistance that may include the identification of funding resources for the implementation of management practices. 	
Funding Mechanism	<ul style="list-style-type: none"> • Identification of funding mechanism for administration, water quality monitoring, and management practice evaluation and development. 	

<i>Deliverable</i>	<i>Description</i>	<i>Due Date</i>
Annual Reports	<ul style="list-style-type: none"> • Covers the calendar year and details accomplishments and plans relative to all aspects of the watershed effort; • All monitoring results must include the field and laboratory quality control sample results as specified in the project QAPP; • Tabulated water quality monitoring data tables, graphs, and maps where samples were collected; • Results of management practice evaluations conducted during the reporting period; • Status of management practice implementation; and • Planned activities for the coming year, including, but not limited to, details of monitoring programs, management practice evaluations and revisions to compliance timetables. 	<ul style="list-style-type: none"> • <i>Annual, March each year</i>

Implementation of Watershed Program Plan

A comprehensive watershed program may take several years to develop. However, throughout the course of the development and implementation process, deliverable milestones must be met in order for the watershed group to maintain the conditional waiver. Therefore, the watershed group must routinely assess objectives, tasks, and accomplishments to be sure obligations are met. In addition, the following tips may help the watershed group stay on target during stabilization of the program.

- Watershed group participants should sign the watershed program plan. This helps to reinforce the commitment to meet the conditions of the waiver.

- Review and set work product milestones for meeting the timeline of deliverables to the Regional Board. Break down deliverables into easily attained steps to completion. This will help maintain the watershed group's momentum.
- Track accomplishments. No matter how seemingly insignificant, progress is progress and helps the watershed group affirm a sense of success.
- Consider hiring a paid facilitator or program coordinator who can assist in setting priorities, keep the program focused, rapidly identify problems with meeting objectives, and suggest procedures or problem solving approaches when needed.
- Prepare deliverables for the Regional Board.
- Plan activities for subsequent years to sustain the watershed program through a 10 year implementation plan.

RESOURCES

Regional Water Quality Control Board Central Valley Region Staff

STAFF	LOCATION	PHONE NUMBER
Bill Marshall Supervising Water Resources Control Engineer	Sacramento Branch Main Office 3443 Routier Road, Suite A Sacramento, CA 95827-3003	(916) 255-3000
Bill Croyle Senior Water Resources Control Engineer	Sacramento Branch Main Office 3443 Routier Road, Suite A Sacramento, CA 95827-3003	(916) 255-3111
Lonnie Wass Supervising Water Resources Control Engineer	Fresno Branch Office 1685 E Street Fresno, CA 93706	(559) 445-5116
Russell Walls Senior Water Resources Control Engineer	Fresno Branch Office 1685 E Street Fresno, CA 93706	(559) 445-5116
Dennis Heiman Staff Environmental Scientist	Redding Branch Office 415 Knollcrest Drive, Suite 100 Redding, CA 96002	(530) 224-4845

REFERENCES

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ATTACHMENT A

Example: Commitment to Participate in a Watershed Group

We, the undersigned, are committed on this date _____ to forming a watershed group in the _____ watershed for the purposes of complying with the California Regional Water Quality Control Board Central Valley Region (Regional Board) Resolution No. R5-2002-0201, Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands. We recognize this will necessitate the development of a watershed program implementation plan. The plan will address objectives to complete certain minimum work intended to provide the Regional Board information regarding the progress of development of the watershed program. We understand the deliverables include all phases of watershed assessment, monitoring program planning and implementation, overall program evaluation, and developing an outreach and education component for management practices if monitoring indicates it is necessary to reduce discharges of waste to acceptable levels. Furthermore, we are committed to working with the Regional Board to satisfy the conditions of Resolution No. R5-2002-0201 and understand that the failure of the watershed group to demonstrate an ability to comply with the conditions will result in the loss of the waiver.

<i>NAME</i>	<i>REPRESENTING</i>	<i>ADDRESS</i>	<i>PHONE NUMBER</i>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

ATTACHMENT B

Example: Commitment of Individual Participation

I, _____ am an owner and/or operator of irrigated lands in _____ watershed. I understand the _____ (watershed group) has assumed responsibility for complying with the California Regional Water Quality Control Board Central Valley Region (Regional Board) Resolution No. R5-2002-0201, Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands. I support the watershed group, and agree to provide information to the watershed group when requested regarding my irrigation and discharge operations. Furthermore, I understand that data collected by the watershed group as part of their implementation of the conditional waiver will be public information.

(Signature)

(Date)

(Company)

(Address)

(City, State, Zip Code)

(Mailing Address)

(City, State, Zip Code)

(Phone Number)

As Adopted by Resolution 2002-0150

CALIFORNIA CODE OF REGULATIONS
TITLE 23. Division 3. Chapter 9. Waste Discharge Reports and Requirements
Article 1. Fees

Section 2200. Annual Fee Schedules

(a) Each person for whom waste discharge requirements have been prescribed pursuant to section 13263 of the Water Code shall submit, to the State Board, an annual fee in accordance with the following schedules, except as provided in subdivision (b). The fee shall be submitted for each waste discharge requirement order issued to that person.

(1) Annual fees for persons issued waste discharge requirement orders for discharges to land under the Waste Discharge Requirements¹ and Land Disposal² Programs shall be based on the discharge's fee rating according to the following schedule, except as provided in subdivisions (1)(B) and (1)(C).

ANNUAL FEE SCHEDULE FOR DISCHARGES TO LAND			
Threat to Water Quality (TTWQ)	Complexity (CPLX)	Regulatory Programs	
		Waste Discharge Requirements¹	Land Disposal²
I	A	\$20,000	\$20,000
I	B	\$12,375	\$16,875
I	C	\$6,750	\$13,500
II	A	\$4,500	\$11,250
II	B	\$2,700	\$9,000
II	C	\$2,025	\$6,750
III	A	\$1,690	\$4,500
III	B	\$900	\$3,375
III	C	\$400	\$1,500

(1)(A) The fee rating is based on the discharge's threat to water quality (TTWQ) and complexity (CPLX), defined as follows:

¹ Waste Discharge Requirements (WDRs) are those discharges of waste to land that are regulated through waste discharge requirements issued pursuant to Water Code Section 13263 and that do not implement the requirements of Title 27 of the California Code of Regulations (CCR). Examples include, but are not limited to, wastewater treatment plants, erosion control projects, and septic tank systems.

² Land Disposal WDRs are those discharges of waste to land that are regulated through waste discharge requirements issued pursuant to Water Code Section 13263 and that implement the requirements of CCR Title 27. Examples include, but are not limited to, landfills -- both active and closed -- and operations.

THREAT TO WATER QUALITY

Category “1” – Those discharges of waste that could cause the long-term loss of a designated beneficial use of the receiving water. Examples of long-term loss of a beneficial use include the loss of drinking water supply, the closure of an area used for water contact recreation, or the posting of an area used for spawning or growth of aquatic resources, including shellfish and migratory fish.

Category “2” – Those discharges of waste that could impair the designated beneficial uses of the receiving water, cause short-term violations of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance.

Category “3” – Those discharges of waste that could degrade water quality without violating water quality objectives, or could cause a minor impairment of designated beneficial uses as compared with Category 1 and Category 2.

COMPLEXITY

Category “A” – Any discharge of toxic wastes; any small volume discharge containing toxic waste or having numerous discharge points or ground water monitoring; any Class I waste management unit.

Category “B” – Any discharger not included above that has physical, chemical, or biological treatment systems (except for septic systems with subsurface disposal), or any Class II or Class III waste management units.

Category “C” – Any discharge for which waste discharge requirements have been prescribed pursuant to Section 13263 of the Water Code not included as a Category “A” or Category “B” as described above. Included would be discharges having no waste treatment systems or that must comply with best management practices, discharges having passive treatment and disposal systems, or dischargers having waste storage systems with land disposal.

(1)(B) The annual fees for persons whose discharges are regulated by a general waste discharge requirement issued by the State Board or a Regional Board shall be based on the TTWQ and CPLX of the discharge. All discharges that are subject to a given permit shall pay the same fee.

(1)(C) “Dredge and Fill Operations Fees” for fill or dredge operations shall be assessed, as follows:

Fill:	One acre or less, flat fee of \$2,250 More that one acre, \$2,250 per acre or part thereof (not to exceed statutory maximum)
Dredge:	Less than 10,000 cubic yards, flat fee of \$1,125 10,000 to 20,000 cubic yards, flat fee of \$4,500 More that 20,000 cubic yards, \$4,500 plus \$1,125 for each additional 5,000 cubic yards or part thereof (not to exceed the statutory maximum)

(2) Annual fees for persons issued permits for discharges to surface waters pursuant to the National Pollutant Discharge Elimination System (NPDES)³ Program shall be based on the discharge's fee rating according to the following schedules.

(2)(A) Each public entity that owns and/or operates a storm water conveyance system, or part of such a system, that is subject to a NPDES permit for storm water discharges from a municipal separate storm sewer system (MS4) shall pay an annual fee according to the following schedule. The fee shall be based on the population of the public entity according to the most recently published Census. For public entities other than cities or counties, the population figure shall be the number of people using the entity's facilities on a daily basis. Flood control districts and school districts serving students between kindergarten and twelfth grade shall not pay an annual fee if the city or county within the jurisdiction of the district pays an annual fee.⁴

ANNUAL FEE SCHEDULE FOR AREAWIDE MUNICIPAL STORM WATER SEWER SYSTEM PERMITS AND CO-PERMITTEES	
Population equal to or greater than 250,000	\$ 20,000
Population between 200,000 and 249,999	\$ 17,500
Population between 150,000 and 199,999	\$ 15,000
Population between 100,000 and 149,999	\$ 12,500
Population between 75,000 and 99,999	\$ 10,000
Population between 50,000 and 74,999	\$ 7,500
Population between 25,000 and 49,999	\$ 5,000
Population between 10,000 and 24,999	\$ 3,000
Population between 1,000 and 9,999	\$ 2,000
Less than 1,000 population	\$ 1,000

(2)(B) Storm water discharges associated with industrial activities, including construction projects, that are regulated by a general NPDES storm water permit, including those issued by Regional Boards, shall pay an annual fee of \$700. An amount equal to the fee prescribed shall be submitted with the discharger's Notice of Intent (NOI) to be regulated under a general NPDES permit and shall serve as the first annual fee. For the purposes of this section, an NOI is considered to be a report of waste discharge.

³ National Pollution Discharge Elimination System (NPDES) permits are issued to point source discharges of pollutants to surface waters and are issued pursuant to Water Code Chapter 5.5, which implements the federal Clean Waters Act. Examples include, but are not limited to, public wastewater treatment facilities, industries, power plants, and ground water cleanups discharging to surface waters.

⁴ For Fiscal Year 2002-03 only, the fee shall be 50 percent of the fee described in this subsection.

(2)(C) All other NPDES permitted discharges shall pay a fee according to the following fee schedule, *except as provided in (2)(F)*. The fee shall be based on the effluent flow specified in the discharge permit. If there is no effluent flow specified, the fee shall be based on the designed flow of the facility.

ANNUAL FEE SCHEDULE FOR PERMITTED FLOW	
Permitted Flow (mgd)⁴	Fee
Less than .0001	\$ 1,000
.0001 - .49	\$ 2,900
.50 - .99	\$ 4,800
1.0 – 1.99	\$ 6,700
2.0 – 2.99	\$10,500
3.0 – 3.99	\$14,300
4.0 – 4.99	\$18,100
5.0 - Above	\$20,000

⁴Millions of Gallons per Day.

(2)(D) The annual fee for persons whose discharges are regulated by a general NPDES permit issued by the State Board or a Regional Board (excluding storm water permits) shall be based on the effluent flow specified in the permit, *except as provided in (2)(F)*. If there is no effluent flow specified in the permit, the fee shall be based on the designed flow of the facility. If there is no design flow specified in the permit, the minimum fee on the Annual Fee Schedule for Permitted Flow shall be assessed. All discharges that are subject to a given permit shall pay the same fee.

(2)(E) Public wastewater treatment facilities with approved pretreatment programs shall be subject to a surcharge of \$7,600.

(2)(F) Discharges associated with aquaculture activities that are regulated by an individual or general NPDES permit, including those issued by Regional Boards, shall pay an annual fee of \$1,000. An aquaculture activity as defined in Chapter 40, Section 122.25(b) of the Code of Federal Regulations is a defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals. The definition for this purpose includes fish hatcheries.

(b) Dischargers who own or operate confined animal feedlots, including dairies, shall not be assessed an annual fee for waste discharge requirements regulating those operations. They shall pay a filing fee of \$2,000, which shall be submitted with each report of waste discharge or NOI. If waste discharge requirements are waived pursuant to section 13269 of the Water Code, all or a portion of the filing fee will be refunded in accordance with section 2200.4.

NOTE: Authority cited: Section 185 and 1058, Water Code. Reference: Section 13260, Water Code.